

CFTC Jurisdiction Over OTC Derivatives

Joel Wattenbarger
May 7, 1999

3rd year paper

CFTC Jurisdiction Over OTC Derivatives

Part I: Introduction

Use of over-the-counter (OTC) derivatives¹ - customized instruments purchased primarily by sophisticated participants² in financial markets to manage risk³ - has exploded in the last decade. The International Swaps and Derivatives Association reported that OTC derivative contracts with a notional value of \$29.035 trillion were outstanding at the end of 1997, an increase of 543% over the value outstanding at the end of 1992 and of 3354% over the value outstanding at the end of 1987.⁴

Unsurprisingly, as the use of derivatives has grown, so have incidents of their misuse. Particularly dramatic examples of the havoc that can be wrought by the misuse of derivatives include the Orange County bankruptcy in 1994 and the collapse of Barings Bank in 1995.⁵ While previous derivatives disasters had largely involved exchange-traded derivatives, in the fall of 1998 a financial crisis arose - the near-collapse of Long Term Capital Management, a prominent Wall Street hedge fund - that was fueled in part by investment in OTC derivatives.⁶

Although the use and misuse of OTC derivatives has grown dramatically in the past decade, one fact about these financial instruments has remained relatively constant: disagreement amongst federal regulators and industry participants as to who, if anyone, has regulatory authority over OTC derivatives. The Commodity Futures Trading Commission (CFTC) and the American futures exchanges (whose products compete economically with OTC derivatives) have maintained that the 1974 amendments to the Commodity Exchange Act grant jurisdiction over OTC derivatives to the CFTC. Other interested federal regulators, including the SEC, Federal Reserve, and Treasury Department, as well as OTC derivatives dealers, have generally maintained that the Commodity Exchange Act does not apply to OTC derivatives, and that such derivatives are therefore not subject to direct federal regulation.

The CFTC rekindled this debate in 1998 by issuing a concept release⁷ intended to "reexamin[e] [the CFTC's] approach to the over-the-counter derivatives market."⁸ The CFTC's seemingly innocuous "reexamination" prompted a swift and angry response from the other federal financial regulatory agencies, and ultimately led to passage of legislation temporarily depriving the CFTC of authority to alter its existing regulatory approach to OTC derivatives.⁹ However, this stopgap legislation did nothing to answer the

underlying questions concerning OTC derivatives: does the Commodity Exchange Act give the CFTC jurisdiction over OTC derivatives, and if so, is this grant of regulatory authority appropriate?

This paper considers whether the Commodity Exchange Act does grant regulatory authority over OTC derivatives to the CFTC. Part II describes the Act's structure, and explains why it might be read to confer such authority. Part II also describes the legislative and administrative actions that have been taken to exempt OTC derivatives to date from substantive regulation under the Act. Part III summarizes the arguments made by the CFTC's proponents and opponents as to why the Act should or should not be read to confer regulatory authority over OTC derivatives to the CFTC. Part IV considers the persuasiveness of these arguments, in light of Congressional intent as revealed by the legislative histories of the 1974, 1982, and 1992 amendments to the Commodity Exchange Act. Part V considers the Supreme Court's decision in *Dunn v. Commodity Futures Trading Commission*, a 1997 case that concerned the CFTC's jurisdiction over a narrow class of OTC derivatives, foreign currency options. Although the Court did not address the question of CFTC jurisdiction over OTC derivatives generally in *Dunn*, several aspects of the decision suggest how the Court might approach that question in a future case.

The paper concludes, in Part VI, that while current law does not provide a clear cut answer to the question of CFTC jurisdiction over OTC derivatives, the CFTC does seem to have the stronger legal position in its ongoing debate with the OTC derivatives industry. However, the OTC industry has powerful policy arguments in support of its claim that the CFTC should not engage in substantive regulation of the OTC market. Federal legislation is needed to clarify the legal status of these instruments. This legislation should generally maintain the regulatory regime for OTC derivatives established to date; although regulators will need to incorporate the lessons from the near collapse of Long-Term Capital last fall, particularly those pertaining to systemic risk, in fine-tuning the OTC legal regime.

Part II: Regulatory Treatment of OTC Derivatives

A. Structure of the Commodity Exchange Act

The uncertain regulatory status of OTC derivatives under the Commodity Exchange Act is primarily a function of three factors: the Act's broadly phrased grant of authority to the CFTC, the absence of a statutory definition of "futures" in the Act, and the fact that many types of OTC derivatives had not been developed when the important 1974 amendments to the Act were enacted.

The 1974 amendments to the Commodity Exchange Act established the CFTC as an independent federal regulatory agency, and granted the CFTC jurisdiction over a wide variety of futures contracts.¹⁰ Whereas the Commodity Exchange Act had previously provided for regulation of future contracts on only a limited set of agricultural commodities, such as barley, butter, and corn,¹¹ the 1974 amendments gave the CFTC jurisdiction over futures contracts on "all goods and articles . . . and all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in."¹² As a result of the amendment, futures contracts on foreign currency or interest rate payments, as well as on corn and butter, now fell within the CFTC's jurisdiction.

The Commodity Exchange Act prohibits trading of a futures contract anywhere other than on a CFTC-approved "board of trade."¹³ However, the definitional section of the Act, 7 U.S.C. § 1a, fails to define "futures." This failure to define "futures" is at the heart of the dispute over whether OTC derivatives fall within the regulatory scope of the Act. The CFTC has suggested that various OTC derivatives are futures, and that therefore, absent some other exemption, such derivatives are illegal because they are traded off of a CFTC-approved board of trade. The OTC derivatives industry and its governmental allies have, in

contrast, argued that OTC derivatives are not futures, and that therefore the regulatory regime established by the Act for futures is simply inapplicable to OTC derivatives.

Complicating matters is the fact that most forms of OTC derivatives did not exist at the time of enactment of the 1974 amendments to the Commodity Exchange Act.¹⁴ As a result, the 1974 amendments to the Commodity Exchange Act and their legislative history do not speak directly to the question whether the Act is meant to apply to such instruments.

B. Current Treatment of OTC Derivatives

Although the 1974 amendments to the Commodity Exchange Act arguably subject OTC derivatives to federal regulation, a booming market in OTC derivatives has in fact developed essentially free of regulation to this point. Participants in the OTC derivatives market rely largely on four legislative and/or administrative developments in engaging in OTC derivatives trading despite the apparently sweeping prohibition of off-exchange futures trading in § 6 of the Act. First, as noted above and discussed in greater detail in Part III, the OTC derivatives industry argues that OTC derivatives are not futures, and therefore are not subject to the Commodity Exchange Act's ban on off-exchange futures trading. Second, the "Treasury Amendment" to the Commodity Exchange Act exempts from the Act's coverage OTC derivatives

involving certain categories of assets, including foreign currency. Third, the CFTC in 1989 adopted policy statements indicating its intent not to regulate certain OTC derivatives. Fourth, in 1993 the CFTC, exercising authority granted to it by Congress in 1992, explicitly excluded certain OTC derivatives from the exchange-traded requirement of the Commodity Exchange Act.

1. *The "Treasury Amendment."* The "Treasury Amendment" is a statutory exemption from the Commodity Exchange Act for a subset of OTC derivative transactions. The Amendment was passed by Congress in 1974 at the request of the Treasury Department, which feared that absent an explicit statutory exemption, existing off-exchange foreign currency futures trading between large banks and other sophisticated institutions would fall within the regulatory scope of the Act.¹⁵ The Amendment exempts from the Act "transactions in foreign currency, security warrants, security rights, resales of installment loan contracts, repurchase options, government securities, or mortgages and mortgage purchase commitments, unless such transactions involve the sale thereof for future delivery conducted on a board of trade."¹⁶

2. *The Swaps Policy Statement.* In 1989, the CFTC issued a policy of statement to identify "certain swap transactions which will not be regulated as futures or

commodity option transactions under the Commodity Exchange Act."¹⁷ Specifically, the CFTC established a non-exclusive safe harbor from Commodity Exchange Act regulation for swaps that met the following criteria: they had individually-tailored terms; they lacked exchange-style offset; they lacked a clearing organization or margin system; they were entered into in conjunction with a line of business; and they were not marketed to the public.¹⁸ The policy statement represented a significant turnabout for the CFTC, which in 1987 had raised in an advanced notice of proposed rulemaking¹⁹ the possibility of regulating commodity swaps and simultaneously opened an investigation into Chase Manhattan's OTC derivatives dealer activities.²⁰

The CFTC faced a "firestorm of criticism" for its 1987 actions,²¹ and its 1989 policy statement represented a temporary retreat from the aggressive interpretation of the Commodity Exchange Act suggested by those actions. However, the policy statement did *not* represent a determination by the CFTC that the Commodity Exchange Act is wholly inapplicable to OTC derivatives. Rather, the CFTC expressed its view that "*at this time* most swap transactions, although possessing elements of futures or options contracts, are not appropriately regulated as such under the Act and regulations."²² The CFTC left open the possibility of future regulation of OTC derivatives. In fact, in

discussing the definition of "futures contract" developed by the Commission and the courts under the Commodity Exchange Act, the CFTC emphasized characteristics that are common to exchange-traded futures and OTC derivatives, and deemphasized characteristics that are unique to exchange-traded futures.²³

3. *CFR Parts 34 and 35.* In 1992, Congress gave the CFTC explicit statutory authority to exempt certain derivative contracts from the exchange-traded requirement of the Commodity Exchange Act.²⁴ The 1992 amendments to the Act also stated that the CFTC "may . . . promptly following the enactment" of the amendments, "exercise the exemptive authority" granted by the amendments with respect to hybrid instruments and swaps, two prevalent classes of OTC derivatives.²⁵ The CFTC exercised its authority in 1993, establishing regulatory exemptions for certain swap agreements and hybrid instruments.²⁶ In particular, the CFTC exempted from the Commodity Exchange Act's exchange-traded requirement swap agreements that are entered into between "eligible participants" (institutions, or natural persons with more than \$10 million of assets), are not standardized, are dependent to a material degree on the creditworthiness of the counterparties, and are not entered into through a clearinghouse.²⁷

Again, however, the 1992 statutory amendments and subsequent regulatory actions did not resolve the fundamental question of whether the Commodity Exchange Act applies to OTC derivatives in the first place.²⁸ The 1992 amendments did not define "futures" and did not mandate exemption of swaps and other OTC derivatives. They left an opening for future attempts by the CFTC to engage in substantive regulation of the OTC derivatives market.

C. 1998 Concept Release

In May 1998, the CFTC issued a "concept release" in order to "reexamin[e] its approach to the over-the-counter derivatives market."²⁹ On the surface, this concept release appeared innocuous. The release reviewed the existing exemptions for OTC derivatives, and then posed a number of questions concerning the OTC derivatives market. These questions asked respondents to address, among other things, recent developments in the swaps and hybrid markets, the appropriateness of the current requirements for exemption of swaps and hybrids, the need to modify the existing definition of "eligible participants" in OTC derivatives transactions, and the appropriate regulatory standards regarding the clearing of swaps.³⁰ The CFTC was careful to frame the concept release in the most benign terms possible. It emphasized that "it ha[d] no preconceived result in mind," and that it was "open both to evidence in support of

easing current restrictions and evidence indicating a need for additional safeguards."³¹ The CFTC explained that "[t]his release in no way alters the current status of any instrument or transaction under the Commodity Exchange Act," and that "[a]ll currently applicable exemptions, interpretations, and policy statements issued by the Commission regarding OTC derivatives products remain in effect, and market participants may continue to rely upon them."³² In Congressional hearings prompted by the CFTC's release, Brooksley Born, the CFTC chairperson, maintained the soothing tone of the release, reiterating that the CFTC "had no preconceived result in mind" when it issued the release, and explaining that the release "merely asks for information about current realities in the marketplace and views as to the appropriate Commission response, if any."³³

Despite the CFTC's attempt to couch its concept release in the most benign terms possible, it provoked heated criticism from OTC derivatives market participants and their allies in the federal government. In part, this criticism likely stemmed from a skepticism regarding the CFTC's true regulatory motives with respect to OTC derivatives. Indeed, in subsequent speeches Brooksley Born took a more aggressive position, suggesting that "unacceptable regulatory gaps" may exist with respect to the OTC derivatives market.³⁴ Specifically, she identified lack of transparency, excessive

leverage, insufficient prudential controls, and a historical lack of cooperation among international regulators as areas that need to be addressed by financial regulators.³⁵

More fundamentally, the CFTC release implicitly challenged a bedrock belief of the OTC derivatives industry: that OTC derivatives are not futures, and therefore are not subject to most of the regulatory provisions of the Commodity Exchange Act. In "reexamining its approach" to OTC derivatives regulation, the CFTC was implicitly asserting that it has the statutory authority to engage in such regulation. The CFTC's basis for believing that it has such authority, and the OTC derivative industry's basis for believing that it does not, is the subject of Part III of this paper.

Part III: Competing Views of Jurisdiction Over OTC Derivatives

A. The CFTC View: Functional Equivalence

The CFTC maintains that OTC derivatives are futures, and as such are subject to regulation under the Commodity Exchange Act. As Chairperson Born flatly stated at a Congressional hearing on OTC derivatives in June 1998, "The reach of the [Act] historically has extended to both exchange traded derivatives and derivatives that are sold over the counter."³⁶

The CFTC bases this conclusion on the functional equivalence of exchange-traded derivatives and OTC derivatives. Chairperson Born explained last June: "OTC derivatives are similar in structure and purpose to exchange-traded futures and options. Like exchange-traded derivatives, OTC derivatives are used to perform a wide variety of important risk management functions."³⁷ She illustrated the equivalence of exchange traded and OTC derivatives by describing how a firm could convert a fixed interest rate obligation to a floating rate obligation in one of two ways: by entering into a swap in the OTC market, or by buying a series of Eurodollar futures contracts on a futures exchange.³⁸ Later in her testimony, she relied largely on the functional equivalence of exchange-traded and OTC derivatives in asserting that the "claim . . . that the Commission lacks jurisdiction with respect to OTC derivative instruments . . . is incorrect."³⁹ She explained: "Whether an instrument is sold on exchange or off-exchange does not alter the fundamental characteristics of the instrument. . . . [M]any OTC derivative instruments bear economic characteristics and perform economic functions indistinguishable from exchange-traded futures or option contracts."⁴⁰

The view of CFTC jurisdiction over OTC derivatives expressed by Chairperson Born last summer is consistent with

the arguments advanced by previous CFTC commissioners in previous jurisdictional disputes. The CFTC and SEC have had repeated jurisdictional skirmishes over which agency has authority to regulate futures, options, and options on futures in securities and security indices.⁴¹ These disputes have been resolved by interagency accords, amendments to the Commodity Exchange Act, and the courts; and generally the resolutions have been in the CFTC's favor.⁴² As Philip Johnson, chairperson of the CFTC at the time of the landmark CFTC-SEC jurisdictional accord of 1981, describes it, resolution of jurisdictional disputes between the SEC and the CFTC has generally turned on the function to be served by the financial instrument in question. According to Johnson, "activity that raises or reallocates capital" falls within the regulatory purview of the SEC; but any activity meant to "shift[] . . . price risk" is the regulatory responsibility of the CFTC.⁴³ In other words, for Johnson (and, presumably, for Chairperson Born), the key variable in assessing whether the CFTC has jurisdiction over a given instrument is whether the instrument serves a risk shifting function. If it does, the CFTC has jurisdiction. The nature of the underlying asset (the primary issue for Johnson in his skirmishes with the SEC), whether the instrument trades on an exchange, and the identity of the instruments' users are all secondary. These characteristics

may be relevant to the form the CFTC's regulation will take, but they are irrelevant to the question of regulatory jurisdiction.⁴⁴

B. The OTC Derivatives Industry View: Legal Uncertainty, Regulatory Diversity, and the Inapplicability of the CEA to OTC Derivatives

The OTC derivatives industry and its champions in the federal government do not, for the most part, directly contest the assertion of the CFTC that exchange-traded derivatives and OTC derivatives often have similar functions. The OTC industry is able to point to various features of OTC derivatives that differ from exchange-traded derivatives,⁴⁵ most of which are inherent to the fact that one instrument trades on an exchange and the other does not. However, the industry does not challenge the basic point that exchange-traded and OTC derivatives have the same fundamental purpose, i.e., facilitating the management of risk.

Nevertheless, the OTC industry and its governmental allies object to CFTC assertions of jurisdiction over OTC derivatives on at least three grounds. First, they argue that in asserting jurisdiction, the CFTC is creating uncertainty concerning the legality and enforceability of these instruments. Second, they maintain that the primary goals of the Commodity Exchange Act are inapplicable to OTC

derivatives. Third, they assert that there are benefits to a system of "regulatory diversity," under which no single agency has a regulatory monopoly over a given financial instrument.

1. *Legal Uncertainty.* Representatives of the OTC derivatives industry were highly critical of the CFTC's May 1998 concept release. Their primary argument was that by implicitly asserting jurisdiction over OTC derivatives, the CFTC was creating damaging legal uncertainty concerning such derivatives.

There are several aspects to the industry's claim that the CFTC's assertion of jurisdiction creates legal uncertainty.⁴⁶ First, the industry has expressed concern that the concept release represents an initial move by the CFTC towards revoking or significantly modifying the 1992 swaps and hybrids exemptions and 1989 policy statement. Because the exemptions and the policy statement were both administrative actions, they could be revoked or modified by the CFTC without any new federal legislation. The industry fears that the CFTC will add new conditions to its swaps and hybrids exemption that will, in effect, amount to substantive regulation of OTC derivatives activity.

Second, the industry fears that by signaling its belief that swaps are futures for purposes of the Commodity Exchange Act, the CFTC will encourage private suits by

losing parties to OTC derivative contracts seeking to renege on their contractual obligation to pay. As noted above in Part II, the CEA generally makes illegal futures contracts unless they are traded on an exchange, or are subject to an exemption. In at least one instance in the United States, a court unexpectedly found that a contract for future delivery of Brent blend crude oil, which was generally regarded by market participants as a forward contract and thus outside of the Commodity Exchange Act ban on off-exchange futures contracts, was in fact a futures contract.⁴⁷ And in the United Kingdom in 1992, OTC derivatives dealers suffered significant losses when the British House of Lords found that swaps entered into by local governmental authorities were unenforceable because the local authorities did not have legal power to enter into the agreements.⁴⁸ The U.S. derivatives industry fears similar losses if an American court were to find that a given class of OTC derivatives were futures that had been sold unlawfully off of a CFTC-approved exchange and were therefore unenforceable.

The OTC derivatives industry is particularly concerned with legal uncertainty as it relates to equity swaps. Equity swaps involve an exchange of payments tied to the value of individual equity securities or groups of securities. As a result of the 1982 jurisdictional accord between the CFTC and the SEC, codified in relevant part at 7

U.S.C. § 2a, futures contracts on individual stocks or small groups of stocks are forbidden, and the CFTC does not have authority to exempt broad-based stock index futures from the exchange-traded requirement of the Commodity Exchange Act. Thus, if the CFTC were to assert that equity swaps are in fact futures, such swaps would be particularly vulnerable to attack as violative of the Act. Even if the CFTC were to reaffirm its 1989 policy statement and assure market participants that it did not intend to bring enforcement actions against equity swap dealers, an assertion that equity swaps are futures for purposes of the CEA could open the door to successful suits by losing parties to equity swap agreements. As one observer claimed in Congressional hearings last summer, "Losing counterparties, with savvy counsel, sufficient resources to sue, and no fear of reputational loss, can walk away from these transactions."⁴⁹ The International Swaps and Derivatives Association, an industry group, asserts that legal risks relating to equity swaps "have led many participants to enter into such transactions . . . through off-shore affiliates."⁵⁰ And a representative of Chase Manhattan, which purports to "hold the world's largest derivative portfolio," has threatened to move its OTC derivatives activity offshore "if the legal uncertainty posed by CFTC assertions of jurisdiction is not removed."⁵¹

The OTC derivatives industry has been vocal in arguing that the CFTC concept release is engendering dangerous legal uncertainty with regard to certain OTC instruments. However, this objection to the CFTC's concept release seems overstated. For one, any administrative or legislative action with regard to OTC derivatives is likely to be prospective, not retrospective. As noted above, the concept release was careful to state that the release did nothing to change the regulatory status of instruments under the Act, and that market participants could continue to rely on currently existing exemptions regarding OTC derivatives. Professor Coffee, an academic who is sympathetic in many respects to the OTC industry position on the CFTC concept release, downplays the risk of legal uncertainty arising from the concept release, noting, "I doubt that the CFTC will rush to retract the exemptions now in parts 34 and 35."⁵²

Moreover, to accuse the concept release of creating legal uncertainty is misleading; it would be more accurate to say that the release has focused attention on existing uncertainties inherent in the structure of the Commodity Exchange Act. A relatively forthcoming industry participant, Douglas Harris of Arthur Andersen LLP, recognized this fact in congressional testimony last summer. After noting that "[t]he argument has been made that the

Concept Release creates legal uncertainty," Harris admitted that in fact, "it is an inescapable fact that legal uncertainty exists today," and pointed in particular to the uncertain status of equity swaps under section 2a(1)(B) of the Act.⁵³ If losing counterparties to OTC derivatives of uncertain legality, such as equity swaps, wish to bring suit to evade their obligations under the derivative contract in question, they are free to do so, just as they were free to do so before the CFTC ever issued its concept release. The position taken by the CFTC with regard to OTC derivatives' status as futures under the Commodity Exchange Act may have some marginal effect on how a court would decide such a challenge. Ultimately, however, any such challenge would be decided based on the courts' own reading of the Act.

In this regard, it is also worth noting that the concept release does not, as some industry participants have claimed, represent a radical departure from previous CFTC statements and administrative actions regarding the status of OTC derivatives under the Commodity Exchange Act. The CFTC has previously taken action - often under heavy industry, Congressional, and interagency pressure - to exempt certain classes of OTC derivatives from regulation under the Act. Examples of such exemptions include the 1989 policy statement and the 1993 swaps and hybrids exemptions. However, none of these actions represented an admission by

the CFTC that it lacked *jurisdiction* over OTC derivatives. Rather, the CFTC has been careful, when exercising exemptive authority over OTC derivatives, to qualify the exemptions so as to reserve the right to reassert regulatory authority over them at a later date. To the extent that legal uncertainty over OTC derivatives exists, therefore, the uncertainty is not a recent creation of the CFTC; rather, it is an outgrowth of the Act itself, and of the way in which the Act has been interpreted by the CFTC (and others, including the Treasury Department, as discussed below in Part IV) in the quarter century since its creation.

2. *Objectives of the Commodity Exchange Act.* A second argument made by critics of the CFTC's assertion of jurisdiction over OTC derivatives is that the objectives of the Commodity Exchange Act are generally inapplicable to trading in OTC derivatives, and therefore the term "futures" in the Act should not be read to encompass OTC derivatives. Federal Reserve Chairman Alan Greenspan has identified two primary goals of the Act: to address attempts to manipulate commodities markets, and to protect small investors in commodity futures.⁵⁴ Greenspan argues that neither goal is relevant to OTC derivatives. For several reasons, OTC derivatives do not lend themselves to market manipulation. The underlying assets for most OTC derivatives transactions are financial assets with a "very large or virtually

unlimited deliverable supply"; the "vast majority of . . . OTC contracts are settled in cash"; "costs of failure to deliver in OTC contracts are almost always limited to actual damages"; and "the prices established in privately negotiated transactions are not widely disseminated or used . . . as the basis for pricing other transactions."⁵⁵ And the OTC derivatives market consists of large banks as dealers and sophisticated institutions, such as large corporations and hedge funds, as end users; governmental protection of these parties is unnecessary. Greenspan notes that professional counterparties to OTC derivatives transactions have demonstrated an ability to look out for themselves, for instance by carefully checking the credit of counterparties and by using netting and collateral agreements.⁵⁶ He also notes that OTC derivatives dealers have a powerful incentive to maintain a good reputation, which also minimizes the need for governmental regulation.

3. *Regulatory Diversity.* A final argument made by those opposed to the CFTC's assertion of jurisdiction over OTC derivatives is that the OTC market has benefited from "regulatory diversity." According to proponents of this view, OTC derivatives like swaps do not have a single "market regulator," as do securities (the SEC) and futures (the CFTC) (of course, this line of argument assumes the view that swaps are not themselves futures).⁵⁷ Rather,

regulation of swap participants occurs indirectly, via regulation of the institutions that deal in swaps. In addition, OTC derivatives industry participants argue that the market participants are themselves able to regulate each others' behavior effectively. This section will first review the arguments made by industry and academia in favor of "regulatory diversity" with respect to OTC derivatives. It will then consider the validity of a major premise of the regulatory diversity argument: that the OTC derivatives market itself can serve as an effective regulator of market participants' behavior.

a. *The Benefits of Regulatory Diversity.* In Congressional testimony last summer, a leading swap dealer identified several advantages of regulatory diversity. First, regulatory diversity "places greater reliance on market discipline than would a single, monolithic regulator." Second, regulatory diversity allows each regulator to gain a thorough understanding of the particular type of institution for which it has responsibility. Third, regulatory diversity "encourages innovation" - presumably on the part of regulators, who are given an incentive to develop a regulatory scheme that is attractive to derivatives dealers and end-users, but perhaps also on the part of derivatives dealers, who are given an incentive to develop products that face minimum regulatory oversight.⁵⁸

Inherent in both the first and third purported benefits of regulatory diversity is the assumption that the characteristics of the OTC derivatives market are such that the market itself is generally an effective regulator of market participants' behavior.

In the wake of the Long-Term Capital Management crisis last fall, Chairman Greenspan endorsed the "regulatory diversity" model of OTC derivative regulation. Greenspan expressed skepticism that hedge funds, an important participant in the OTC derivatives market, could be regulated directly. Instead, he argued that "the best we can do . . . is what we do today - regulate them indirectly through the regulation of the sources of their funds" [i.e., banks].⁵⁹ According to Greenspan, the "first line of defense" in OTC derivatives transactions is market participants. The "second line of risk defense" consists of banking supervisors, who have, noted Greenspan, "built up significant capabilities in evaluating the complex lending practices in OTC derivatives markets."⁶⁰

Chairperson Born of the CFTC views jurisdictional questions concerning derivatives to turn on the function of the instrument in question: if the instrument can have a risk management function akin to that of traditional exchange-traded futures, it is a future under the Commodity Exchange Act, and hence falls under the CFTC's jurisdiction.

In contrast, Chairman Greenspan views jurisdiction over derivatives as turning on the institutions dealing or using derivatives, or the institutions (i.e., exchanges) on which derivatives are traded. Under this view, the CFTC's jurisdictional role is to regulate a specific set of institutions - commodity exchanges - not a specific set of instruments. "Futures" should be defined as "the risk management instruments that trade *on exchanges*," not as "all instruments with a risk management function."

The regulatory diversity justification finds support in the academic literature as well. Roberta Romano has argued that regulatory competition between the CFTC and SEC with regard to derivative instruments with similar functions has fostered product innovation in the derivatives market. She explains that "regulators operating in . . . a competitive regulatory environment will encourage innovation . . . , because doing so increases the scope of the agency's operations, and hence maximizes its budget."⁶¹ John Coffee has also examined the potential benefits of regulatory competition in the regulation of risk-management financial instruments, though he ultimately is less sanguine than Romano about the existence of strong benefits from regulatory competition in practice.⁶²

Coffee writes that "regulatory competition works when the regulated firm has mobility but the competing agencies

are securely cabined by clear jurisdictional lines that they cannot exceed."⁶³ He made this statement in the context of regulatory competition between the CFTC and the SEC. However, with regards to many OTC derivatives, the competing agencies are the CFTC on the one hand, and the market itself as primary regulator on the other (with other federal agencies serving a secondary, indirect regulatory function). For this sort of regulatory competition to be effective, two things must be true. First, the market must be a reasonably effective regulator. Second, it is important that futures not be defined to mean all financial instruments, exchange-traded or OTC, with a risk-shifting function. Rather, the CFTC's jurisdiction must be "securely cabined," confined to exchange-traded futures. Firms in the market will then have mobility to use either exchange-traded futures (the CFTC's regulatory regime) or OTC derivatives (the market's "regulatory regime") to manage risk. And the CFTC will have an incentive to minimize the regulatory costs it imposes on futures trading.

b. *The Market as Regulator.* The Long-Term Capital Management crisis is a useful means of exploring the claim, central to the "regulatory diversity" argument, that the OTC derivatives market is itself an effective regulator of market participants' behavior. Those making this claim note that participants in the OTC derivatives market are almost

exclusively large, sophisticated institutions: banks, large corporations, hedge funds, broker/dealers. These institutions presumably have the motivation and ability to check on each others' stability and creditworthiness. So, for instance, a corporation would not enter into a derivatives contract with an OTC derivatives dealer without ensuring that the dealer will be capable of meeting its obligations under the contract. Similarly, a bank would not loan money to a hedge fund engaged in speculative OTC derivatives trading without investigating the fund's leverage and the riskiness of its OTC derivative investments.

The market appears to have failed the "self-regulation" test with regard to Long-Term Capital Management. Managers of the fund refused to give investors or creditors detailed information about the fund's trading strategies or the extent of its leverage,⁶⁴ apparently because creditors and investors were "bedazzled" by the highly-credentialed managers of the fund.⁶⁵ As a result, "Wall Street professionals were shocked" when, last September, they discovered the extent of Long-Term Capital's leverage.⁶⁶ If banks had more effectively scrutinized Long-Term Capital's credit position and had been less willing to extend additional credit to the fund over the last several years, it is likely that the Long-Term Capital crisis would never

have materialized, and Federal Reserve involvement would not have been necessary.

The OTC derivatives industry and its defenders in government would likely have at least two responses to the claim that the Long-Term Capital episode demonstrates the industry's inability to "self-regulate." First, while conceding that a number of parties dealing with Long-Term Capital misjudged the risk they were entering into, the OTC industry would describe the Long-Term Capital episode as a learning stage in the market's ongoing education about dealing in OTC derivatives. The industry would note that bad loans are a fact of life in the banking business, and that banks become more efficient lenders by examining why certain loans went bad and altering lending practices accordingly. With regard to Long-Term Capital specifically, there is already evidence of creditors altering their OTC derivatives risk management practices, for instance by amending collateral agreements with hedge funds dealing in such derivatives, in response to the deficiencies in past practices revealed by the Long-Term Capital experience.⁶⁷

Second, OTC derivatives industry participants could point to the Long-Term Capital episode as an example of the effectiveness of indirect regulation of OTC derivatives. Neither Long-Term Capital Management itself, nor the OTC derivative instruments in which it was invested, were

subject to direct federal regulation. Nevertheless, by dint of its supervisory authority over banks that were major lenders to the fund, and its more general role as overseer of U.S. financial markets, the Federal Reserve learned of the extent of the fund's financial difficulties last September before these difficulties were public knowledge, and was able to facilitate an infusion of capital into the fund from its lenders before the fund failed.⁶⁸ The Federal Reserve's actions have come under considerable criticism from some, largely on the ground that by helping orchestrate a bail-out of Long-Term Capital, the Federal Reserve contributed to moral hazard on the part of future lenders to other large hedge funds.⁶⁹ However, in the short term at least the Federal Reserve's actions appear to have achieved its goal: preventing a "fire sale" of Long-Term Capital's assets at below-market prices, and a consequent severe credit crunch on U.S. capital markets.

Of course, the lessons drawn by the CFTC with regard to the Long-Term Capital episode are likely to be quite different from those drawn by the OTC derivatives industry and the Federal Reserve. Even granting the "success" of the Federal Reserve's intervention in September, the Commission might question the merits of such a last minute, ad hoc regulatory response to problems in the OTC derivatives market, relative to direct, continuous oversight of the

market by the CFTC. For instance, the CFTC could creditably argue that were substantive regulatory limits in place regarding the extent to which OTC derivative counterparties could be leveraged, the Long-Term Capital crisis could have been averted altogether.

The CFTC could also question the characterization of the Long-Term Capital episode as simply one step in the market's ongoing learning process about OTC derivatives. Given the potential, admitted by Federal Reserve officials, of the collapse of Long-Term Capital to trigger a severe credit crunch in U.S. capital markets, it seems plausible that the value of the education to be gleaned from such a collapse is not worth its potential cost. In other words, the systemic risk posed by large-scale dealing in OTC derivatives is too great to permit such dealing to continue essentially free of substantive federal regulation.⁷⁰

Part IV: Congressional Intent

The CFTC and the OTC derivatives industry have sharply divergent views of the status of OTC derivatives under the Commodity Exchange Act. The CFTC (and the commodities exchanges, economic competitors of OTC dealers) argue that OTC derivatives are functionally equivalent to exchange-traded futures, and therefore OTC derivatives are futures under the Act. The OTC derivatives industry (and its

champions in the federal government: the SEC, Federal Reserve, and Treasury Department) maintain that OTC derivatives are not futures under the Act, because to hold otherwise would increase legal uncertainty, be inconsistent with the purposes of the Act, and bring the benefits of "regulatory diversity" to the regulation of risk management instruments. This Part considers the legislative history of the 1974, 1982, and 1992 amendments to the Act, particularly the passage of the Treasury Amendment in 1974, to assess the validity of these competing positions.

1. *The 1974 Amendments.* As noted above, Congress in 1974 significantly amended the Commodity Exchange Act. Amongst other things, the amendments created the CFTC, and greatly expanded the number and nature of commodities covered by the Act. In addition, two circumstances concerning the amendments sowed the seeds for the current controversy regarding the Act's applicability to OTC derivatives. First, the swaps most commonly used today had simply not been created in 1974. Second, the amendments did not define the term "futures."

Several elements of the legislative history to the 1974 amendments lend support to the OTC industry's argument that the CEA does not apply to OTC derivatives. The "Short Explanation" of the amendments, which prefaces the Senate Report accompanying the amendments, speaks exclusively in

terms of regulating exchanges. It describes the "fundamental purpose" of the Act as "insuring [sic] fair practice and honest dealing on the commodity exchanges and providing a measure of control over those forms of speculative activity which often demoralize the markets to the injury of producers, consumers, and the exchanges themselves."⁷¹

In addition, while the Commodity Exchange Act does not define the term "futures," the legislative history to the 1974 amendments does include a "glossary of terms used in commodity futures trading" in an appendix. The glossary defines "futures contract" as "contracts for the purchase and sale of commodities for delivery some time in the futures on an organized exchange and subject to all terms and conditions included in the Rules of that Exchange."⁷² The interpretive force of this definition is severely limited by a footnote accompanying the glossary, which states: "The inclusion of this glossary is intended for the convenience of Members of the Senate, their staff, and interested public. It is not, under any circumstances, to be deemed a set of legal definitions, nor a guide to interpretation of the present Act"⁷³ Nevertheless, the substance of the legislative history's "short explanation" and its definition of the term "futures contract" suggests that Congress had exchange-traded

instruments in mind in drafting the 1974 amendments to the CEA.

Perhaps the most significant evidence from the legislative history to the 1974 amendments relates to the enactment of the "Treasury Amendment." However, this evidence does not cut entirely in favor of either the CFTC or the OTC derivatives industry. On the one hand, the addition of the Treasury Amendment suggests that, at the time the 1974 amendments to the Commodity Exchange Act were enacted, the language of the Act was read by many to encompass a broad array of risk-shifting instruments, both exchange-traded and OTC. On the other hand, Congress's decision to grant a statutory exemption to certain off-exchange transactions in response to concerns raised by the Treasury Department suggests that Congress did not intend, in enacting the Commodity Exchange Act, to subject off-exchange transactions to the same CFTC regulation as exchange-traded futures.

As noted above, the Treasury Amendment exempts off-exchange "futures" trading in certain commodities, such as foreign currency, from substantive regulation under the Commodity Exchange Act. The sort of trading exempted by the amendment was likely the closest analog, in 1974, to the OTC derivatives activity that is currently the subject of contention between the CFTC and the OTC derivatives

industry. The Treasury Department described the off-exchange foreign currency futures trading it wished to exempt via amendment as involving "an informal network of banks and dealers." The dealer market "consist[ed] primarily of the large banks." The purpose of the trading was to "serv[e] the needs of international business in hedging the risks that stem from foreign exchange rate movements."⁷⁴

When the revision of the Commodity Exchange Act was under consideration in Congress in 1974, the Treasury Department indicated its belief that without the addition of its proposed amendment, the changes being considered to the Commodity Exchange Act would subject interbank foreign currency "futures" trading to regulation under the Act. In a letter to the Senate Committee considering the 1974 amendments, the Treasury Department's general counsel noted that the proposed changes' language "is sufficiently broad to authorize the Commission to regulate trading in foreign currencies by banks in the over-the-counter market."⁷⁵

The Treasury Department's stance in 1974 stands in contrast to its position today. In Congressional hearings last summer, the Department aligned itself with those who do not believe that the Commodity Exchange Act grants the CFTC jurisdiction over OTC derivatives transactions.⁷⁶ The Treasury Department's change of position is consistent with

other actions it has and the Federal Reserve have taken over the past 25 years to protect their regulatory "clientele" - banks and OTC derivatives dealers.⁷⁷ However, the fact remains that at the time of passage of the 1974 amendments, the Treasury expressed a clear view that over-the-counter risk management instruments were included in the CFTC's jurisdictional purview under the Act. The explanation for the Treasury Department's change of heart was captured by Federal Reserve Chairman Greenspan in Congressional testimony last summer. He described the history leading to the enactment of the Treasury Amendment, and concluded: "What the Treasury did not envision, and the Treasury Amendment *did not protect*, was the subsequent [to 1974] development and spectacular growth of a much wider range of OTC derivative contracts [than derivative contracts on foreign currencies]."⁷⁸

Another noteworthy aspect of the 1974 Treasury Department letter proposing the Treasury Amendment is its use of the word "futures" to refer to over-the-counter trading in the future delivery of foreign currencies. Today, the OTC derivatives industry uses the word "futures" to refer exclusively to exchange-traded futures. Agreements of the sort described in the Treasury letter would be referred to as forward contracts,⁷⁹ or more generically as OTC derivatives. The Treasury Department's use of the term

"futures" to refer to OTC transactions would buttress a claim by the CFTC that the Commodity Exchange Act was understood by Congress in 1974 to apply (absent a statutory exemption) to all transactions in risk-shifting instruments, on or off exchanges.

While the circumstances surrounding the enactment of the Treasury Amendment lend credence to the CFTC's position, the enactment itself suggests that Congress did not, in fact, mean to grant CFTC broad jurisdiction over OTC derivatives. In its 1974 letter to the Senate committee considering amendments to the CEA, the Treasury Department wrote, "We do not believe that either the House of Representatives or your Committee intends the proposed legislation to subject the foreign currency futures trading of banks or other institutions, other than on an organized exchange, to the new regulatory regime."⁸⁰ To ensure that the Commodity Exchange Act did not apply to off-exchange "futures" trading, the Treasury Department proposed statutory language to be added to the Act. This language, which became the Treasury Amendment, was adopted nearly word-for-word by Congress.⁸¹ The Senate Report accompanying the 1974 amendments explained the adoption of the Treasury Amendment as follows:

[T]he Committee included an amendment to clarify that the provisions of the bill are not applicable to trading in foreign currencies and certain enumerated financial instruments unless such

trading is conducted on a formally organized futures exchange. A great deal of the trading in foreign currency in the United States is carried out through an informal network of banks and tellers. The Committee believes that this market is more properly supervised by the bank regulatory agencies and that, therefore, regulation under this legislation is unnecessary.⁸²

This paragraph is notable for the way in which it echoes the OTC derivatives industry's explanations of why the Commodity Exchange Act should not be read to grant jurisdiction over OTC derivatives to the CFTC. First, a primary purpose of the Treasury Amendment was "to clarify" the legal status of, i.e. increase legal certainty concerning, certain risk management financial instruments. Second, the last sentence presents the "regulatory diversity" argument for withholding jurisdiction over OTC derivatives from the CFTC. In the case of off-exchange foreign currency futures trading, the closest analog in 1974 to today's array of OTC derivatives, Congress felt that it was the banking regulators (the Federal Reserve and the Treasury Department), not the CFTC, that were best situated to regulate.

2. *The 1982 Amendments.* The 1982 amendments to the Commodity Exchange Act codified the 1981 jurisdictional accord between the SEC and the CFTC. The jurisdictional accord did not relate directly to OTC derivatives; rather, it arose out of a dispute concerning which agency had regulatory authority to approve the on-exchange trading of options and futures on GNMA certificates.⁸³ However, the

CFTC has pointed to the legislative history to the 1982 amendments in support of its claim to jurisdiction over OTC derivatives.⁸⁴ Specifically, the CFTC has cited the following statement in the legislative history, which summarizes Congress's intent in dividing regulatory authority between the CFTC and the SEC: "The Committee has long recognized and accepted the inherent differences between the futures industry and the securities industry and endorses the concept of separate regulation. Basically, the CFTC will retain its traditional role of regulating markets and instruments that serve a hedging and price discovery function while the SEC will regulate markets and instruments with an underlying investment purpose."⁸⁵

While this statement can be read to support the CFTC's claim of jurisdiction over OTC derivatives, it is not as clearly supportive of the CFTC's position as the Commission has suggested. On the one hand, the term "instruments that serve a hedging and price discovery function" appears, on its face, to include both exchange-traded and OTC derivative products. On the other hand, it is important to put the statement in the context of the 1982 legislation. As noted above, that legislation was designed to resolve a conflict between the SEC and CFTC over exchange-traded products, not OTC products. In fact, at the time the 1982 amendments were enacted, the OTC derivatives at the heart of the current

dispute were in their infancy. Therefore, one should hesitate to read too much significance for the OTC derivatives debate into statements appearing in the 1982 legislative history.

3. *The 1992 Amendments.* Unlike the 1982 amendments, the 1992 amendments directly addressed the regulation of OTC derivatives. The amendments empowered the CFTC to exempt certain OTC derivatives from the exchange-traded requirement of the Commodity Exchange Act. As noted above, however, the amendments ducked the basic jurisdictional question of whether swaps and other OTC derivative products are futures under the Act. Unsurprisingly, therefore, the legislative history to the 1992 amendments sheds little light on the scope of the CFTC's jurisdiction.

One passage from the 1992 legislative history does bear examining, however. In the course of explaining the background of and need for the legislation, the Senate Report accompanying the amendments stated: "Since 1974, when Congress created the CFTC, the principle of 'functional' regulation was intended to govern the introduction of new financial instruments."⁸⁶ The Report then quoted the passage from the 1982 history stating that the CFTC is to regulate markets and instruments with a hedging and price discovery function.⁸⁷ This statement is probably the most clear cut statement in support of the CFTC's position on OTC

derivatives in the legislative history of the Commodity Exchange Act since 1974 (when the CFTC was created). However, even this statement does not unequivocally support the CFTC's position, as the statement was backward-looking, not forward-looking. After stating that CFTC jurisdiction had historically been premised on the principle of "functional" regulation, the Report stated that "increasingly, this principle has become blurred as novel 'hybrid' instruments are developed."⁸⁸ The Report went on to explain that "lack of clarity" exists "over the extent of CFTC jurisdiction with respect to new 'hybrids.'"⁸⁹ So while the legislative history at first seemed to endorse the principle of "functional" regulation, it then cast doubt on the principle by suggesting that, notwithstanding the principle, the regulatory status of hybrid instruments that are functionally equivalent in large part to certain exchange-traded instruments was uncertain.

Part V: Judicial Interpretation of the Commodity Exchange Act: *Dunn*

Two years ago, in *Dunn v. Commodity Futures Trading Commission*,⁹⁰ the Supreme Court considered the scope of CFTC jurisdiction over a specific type of OTC derivative, foreign currency options. A unanimous Court held that the Treasury Amendment exemption for "transactions in foreign currency"

extends to foreign currency options, and hence the CFTC does not have authority to regulate such options under the Commodity Exchange Act.⁹¹ The case did not directly address the jurisdictional issue discussed in this paper; options are clearly a type of OTC derivative different from futures, regulated pursuant to a separate set of provisions under the Commodity Exchange Act. However, the *Dunn* case suggests, in at least two ways, how the Court might approach a more general challenge to the CFTC's jurisdiction over other types of commonly-traded OTC derivatives, such as swaps and hybrids. First, the decision suggests the Court's understanding of the term "futures" as used in the Commodity Exchange Act. Second, the decision suggests the approaches the Court is likely to take in interpreting jurisdictional questions under the Act.

A. Meaning of "Futures"

The *Dunn* decision, like the Commodity Exchange Act, does not directly define the term "futures." The absence of a definition is itself of interest, as the Court did define "option,"⁹² "forward contracts,"⁹³ and "spot transactions."⁹⁴ The Court's failure to define "futures" is indicative of the lack of consensus regarding the proper definition of the term under the Act. However, various aspects of the Court's decision suggest that the Court understands the term

"futures" to encompass a relatively broad set of transactions, both on- and off-exchange.

First, in discussing the Treasury Amendment and the history of its enactment, the *Dunn* Court adopted the Treasury Department's 1974 usage of the term "futures."⁹⁵ In other words, the Court used "foreign currency futures" to mean derivative transactions involving foreign currencies that occur both on and off of organized exchanges. As noted above, the Treasury Department used "futures" in this broad way when lobbying for a foreign currency exemption from Commodity Exchange Act regulation in 1974, though the Department has subsequently aligned itself with the OTC industry's narrower view of "futures" (i.e., "futures," by definition, refers only to products traded on an exchange).

Second, the Court's definition of the term "forward contracts" ("agreements that anticipate the actual delivery of a commodity on a specified future date") suggests that for the Court, the operative distinction between a "forward contract" and a "future" is whether actual delivery is customary under the contract, not whether the contract is traded on an exchange. In contrast, the OTC derivatives industry regards the operative distinction between forward contracts and futures as whether the contract in question has standardized terms and is traded on an exchange.⁹⁶

It is impossible to draw firm conclusions about the Court's view of the term "futures" under the Act, because the Court does not define the term in *Dunn* and because the basic issue addressed by the Court in *Dunn* involved options, not futures. Nevertheless, the circumstantial evidence presented by the *Dunn* opinion suggests that the Court's working understanding of the term "futures" in the Commodity Exchange Act may be broad enough to encompass such OTC derivatives as swaps and hybrids.

B. Interpretive Approaches

The *Dunn* Court took two main approaches in interpreting the Commodity Exchange Act: it examined the plain text of the statute, and it considered the congressional purpose behind the Act, as revealed by the Act's legislative history. This section will consider how each interpretive approach might be applied to a challenge to the CFTC's authority under the Commodity Exchange Act to regulate broad OTC derivatives generally. The section will also note another possible approach which the Court failed to pursue in the *Dunn* decision: deferring to the CFTC interpretation of the statute.

The *Dunn* Court began its analysis by noting that its basic obligation was "to apply the statute as Congress wrote it."⁹⁷ In *Dunn*, the dispute centered on the meaning of the term "transactions in foreign currency" within the Treasury

Amendment. The Court concluded that, contrary to the position of the CFTC, the "normal reading of the . . . phrase" included foreign currency options in addition to foreign currency futures.⁹⁸

The "plain meaning" approach to interpretation seemed particularly apt to *Dunn*, a case in which the CFTC plainly took an unnaturally narrow view of the phrase "transactions in foreign currency." However, the plain meaning approach seems less helpful in the context of CFTC jurisdiction over OTC derivatives generally. As noted above, it is unclear whether the phrase "any transaction in, or in connection with, a contract for the purchase or sale of a commodity for future delivery"⁹⁹ in the Commodity Exchange Act extends to such OTC derivatives transactions as swaps and hybrids. Perhaps one could argue that because actual delivery is not customary in OTC derivatives contracts, such contracts do not meet the "commodity for future delivery" requirement. However, the same is true of exchange-traded futures, over which the CFTC undeniably has jurisdiction. In short, the "plain language" of the statute simply does not provide a clear answer to the question whether the CFTC has authority to regulate OTC derivatives.

A second interpretive approach taken by the Court in *Dunn* was to consider Congress' purpose in enacting the Commodity Exchange Act, and in particular the Treasury

Amendment. The Court noted that in 1974, the year of the Treasury Amendment's enactment, foreign currency options (the instruments at issue in *Dunn*) did not exist. Nevertheless, the Court decided that the Treasury Amendment exemption for transactions in foreign currency extended to foreign currency options, as "Congress' broad purpose in enacting the Treasury Amendment was to provide a general exemption from CFTC regulation for sophisticated off-exchange foreign currency trading."¹⁰⁰ The Court concluded that this was Congress' purpose by reviewing the history of the Amendment's passage, which is described above in Part IV.

A "Congressional purpose" approach to statutory interpretation might lead the Court to conclude that the CFTC does not have jurisdiction over OTC derivatives generally. In particular, the OTC derivatives industry can take heart from the fact that in *Dunn*, the Court found that a class of instruments that did not exist at the time of the Treasury Amendment's passage was nevertheless exempt from regulation under the Amendment based on Congress' intent to exempt a broad sweep of transactions from CFTC regulation. The key question going forward is exactly how broad this sweep is. Were the Court to be presented with a challenge to the CFTC's jurisdiction over OTC derivatives generally, would it confine its understanding of Congressional intent,

as in the *Dunn* case, to " a general exemption . . . for sophisticated off-exchange foreign currency trading"? Or would it understand Congress' intent more broadly, as an exemption for sophisticated off-exchange trading in a variety of financial assets, including foreign currency and interest rate payments?

It is impossible to say with certainty how the Court would view Congressional intent in the face of a challenge to the CFTC's jurisdiction over OTC derivatives generally. However, it is worth noting that interbank off-exchange foreign currency trading was the very activity that motivated the Treasury Department to lobby for enactment of the Treasury Amendment in 1974. It was therefore not a stretch for the *Dunn* Court to find foreign currency options to be covered by the Amendment. In contrast, the Court might well be reluctant to extend the Amendment's scope to other off-exchange derivatives involving other underlying assets.

Finally, *Dunn* is revealing because of one interpretive approach the Court implicitly rejected: it refused to defer to the CFTC's interpretation of the Commodity Exchange Act. The Court did not even raise the possibility of deferring to the Commission in the *Dunn* decision itself. However, in oral argument the Court did question both parties as to the relevance of the principle of deference to administrative

agency interpretations of regulatory statutes. The Court's decision in *Dunn* - rejecting the CFTC's claim of jurisdiction over foreign currency options - indicates that the Court chose not to follow the principle of deference to an administrative agency. Its questions during oral argument suggest why. First, the Court stated that "[w]e don't ordinarily give deference" to agencies' interpretations of their jurisdictional reach.¹⁰¹ Second, the Court noted that to the extent Congress wished to defer to any agency's interpretation of the Treasury Amendment, it seemed at least as likely that that agency should be the Treasury Department, not the CFTC.¹⁰² Because the Treasury Department and the CFTC disagreed as to the proper interpretation of the Treasury Amendment in *Dunn*, the Court evidently decided that it did not owe deference to either agency.

Part VI: Conclusion: Policy Choices

There is no clear answer to the question of CFTC jurisdiction over OTC derivatives. On the whole, however, it seems the CFTC has the better of the legal arguments concerning the proper interpretation of the Commodity Exchange Act as currently written. The CFTC can make a strong case that the Act confers jurisdiction over the most commonly used OTC derivatives, including swaps and hybrids,

to the CFTC. This case would be based, first and foremost, on the broad, open-ended language of the statute itself. Buttressing the CFTC's argument would be the history of the enactment of the "Treasury Amendment." This history suggests that even the Treasury Department, which is now strongly opposed to CFTC jurisdiction over OTC derivatives, understood the 1974 amendments to the Act at the time of their passage to grant the CFTC such jurisdiction. The CFTC's case would also turn on its contention that the Commodity Exchange Act grants it jurisdiction over all instruments with a risk-management function. This claim is buttressed by various statements in the legislative history accompanying recent amendments to the Act. Finally, the Supreme Court's decision in Dunn suggests that the Court, like the CFTC, understands the term "futures" to encompass a broad range of derivative products, including products traded on and off of organized exchanges.

Of course, the OTC derivatives industry has its own set of legal arguments in support of its claim that its products do not fall within the substantive regulatory sphere of the Commodity Exchange Act. Like the CFTC, the OTC industry can point to certain statements in the legislative history in support of its claim. Specifically, the industry can argue that Congress meant the Act to apply only to exchange-traded risk-management instruments. More fundamentally, however,

the OTC industry can make a powerful argument that its products *should* not fall within the substantive regulatory sphere of the Commodity Exchange Act. While the CFTC's arguments are based largely on statutory language and Congressional intent, the industry's claims are largely policy-based. The OTC industry contends that by asserting jurisdiction, the CFTC is creating damaging legal uncertainty; and the industry argues that the policy objectives that have driven enactment of the CEA and its amendments are inapplicable to OTC derivatives.

Legislative action seems like a natural response to the current uncertainty regarding jurisdiction over OTC derivatives. Legislation could take a variety of forms. Congress could amend the Commodity Exchange Act to define the term "futures," thereby resolving a major source of uncertainty concerning OTC derivatives. Starting points in developing such a definition could include the section of the 1989 swaps policy statement addressing the elements of a futures contract identified by the CFTC and the courts,¹⁰³ and the table in the legislative history to the 1992 Commodity Exchange Act amendments regarding CFTC no-action and interpretive letters and federal court cases addressing whether given financial instruments are futures contracts.¹⁰⁴ If Congress does statutorily define "futures," one major issue will be whether one element of the definition is "an

instrument that is traded on an exchange." The inclusion of this element in the definition of "futures" would seemingly remove OTC derivative from the substantive regulatory provisions of the Act.

An alternative legislative approach would be to explicitly exempt statutorily certain OTC derivatives from the regulatory provisions of the Act. Such a statutory exemption was proposed by the Senate in 1992, but ultimately rejected in the final bill. From the standpoint of the OTC derivatives industry, such a statutory exemption would increase legal certainty by removing the threat of the CFTC reversing course and withdrawing previously issued administrative exemptions.

This paper has focused on the legal question whether, under existing law, the CFTC has jurisdiction over OTC derivatives. However, if Congress were to amend the Commodity Exchange Act to clarify the legal status of OTC derivatives, it will also open a fierce debate over the policy question of what the optimal regulatory scheme for risk-management instruments, exchange-traded and OTC, is. Thus far, it would appear the OTC derivatives industry has the better of the policy argument concerning whether the CFTC should have jurisdiction over OTC derivatives. As noted above, the primary policy objectives of the Commodity Exchange Act - consumer protection and prevention of market

manipulation - seem largely irrelevant to the OTC derivatives market. Moreover, it is an overstatement to claim that OTC derivatives are completely unregulated today; in fact, the principal dealers in the OTC derivatives market, banks and broker-dealers, are overseen by the federal banking agencies and the SEC, respectively. As Professor John Coffee has noted, "If the CFTC contends that it has some comparative advantage over the federal banking agencies or the SEC as a guardian of bank or broker-dealer solvency, this is a radical thesis on which it should bear the burden of proof."¹⁰⁵ Finally, the explosive growth in the OTC derivatives market in recent years suggests an endorsement by market participants of the current regulatory scheme.

On the other hand, recent developments in the OTC derivatives industry suggest that there may be a need to rethink, and perhaps refine, the current regulatory scheme. In particular, the near collapse of Long-Term Capital Management last fall raises concerns regarding the potential contribution of OTC derivatives to increased systemic risk in the economy. Prior to the Long-Term Capital incident, commentators had generally downplayed or dismissed the "systemic risk" rationale for regulation of the OTC derivatives market.¹⁰⁶ However, the Federal Reserve's actions in the Long-Term Capital matter were explicitly

predicated on its "judgment that an abrupt and disorderly closeout of Long-Term Capital's positions," largely in OTC derivatives, "would have posed unacceptable risks to the American economy."¹⁰⁷ Moreover, Chairman Greenspan, referring to the near-collapse of Long-Term Capital, stated, "What is remarkable is not this episode, but the relative absence of such examples over the past five years."¹⁰⁸ These statements are themselves somewhat remarkable, coming as they do from the Federal Reserve, a staunch opponent of substantive regulation of OTC derivatives. They suggest that the near-collapse of Long-Term Capital might have been merely a prelude to more dramatic episodes of systemic risk from OTC derivatives use during future economic downturns.

The threat of systemic risk from the ever-expanding use of OTC derivatives does not necessarily justify imposing substantive regulation on OTC derivatives equivalent to that currently imposed on exchange-traded futures. Ideally, new legislation concerning OTC derivatives would, in addition to increasing legal certainty concerning these instruments, build on the forms of regulation already in place: regulation of market participants' behavior by one another, and indirect regulation of OTC derivatives dealers, lenders, and users by the government agencies that oversee these institutions. For instance, legislation that mandated greater transparency concerning the investment and lending

practices of OTC users might enable the Federal Reserve to foresee and forestall future Long-Term Capital-type potential crises long before they developed into true threats to the American economy.

¹ Derivatives are "financial instruments whose value derives from some other, more fundamental asset." Roberta Romano, *A Thumbnail Sketch of Derivatives Securities and Their Regulation*, 55 **Md. L. Rev.** 1 (1996). More precisely, a derivative is "a contract that either allows or obligates one of the parties . . . to buy or sell an asset." Henry T.C. Hu, *Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism*, 102 **Yale L.J.** 1457, 1464 (1993). See also Thomas A. Tormey, Note, *A Derivatives Dilemma: The Treasury Amendment Controversy and the Regulatory Status of Foreign Currency Options*, 63 **Fordham L. Rev.** 2313, 2315 n.1 (1997) (suggesting that conventional definitions of "derivatives" are overly broad or otherwise unhelpful); Saul S. Cohen, *The Challenge of Derivatives*, 63 **Fordham L. Rev.** 1993, 1993 & n.1 (contending that "there is no generally accepted meaning to the term derivative").

An over-the-counter derivative is a derivative that is purchased elsewhere than on an organized exchange. See *Hu, supra*, at 1465. For a detailed description of the most

commonly used OTC derivatives, options and swaps, see Romano, *supra*, at Parts III-IV.

² Users of OTC derivatives are "typically corporations and sovereign entities." Hu, *supra* note 1, at 1465.

³ Hu describes the risk management function of derivatives as "perhaps [their] most important." See *id.* at 1466. He identifies the other functions of derivatives as "a cheaper alternative to investing in the underlying asset," and a means "to arbitrage differences between the price of the derivative and the price of the underlying asset." See *id.*

⁴ See International Swaps and Derivatives Association, *ISDA Market Survey* (visited Feb. 18, 1999) <<http://www.isda.org>>. These figures are based on voluntary reporting to ISDA by its member dealers, and therefore inevitably underestimate the true value of outstanding OTC derivatives.

The notional value of a derivatives contract refers to the base amount used to calculate the exchange of payments between counterparties to a derivatives contract. It greatly overstates the actual capital at risk in OTC derivatives. ISDA estimates the actual financial risk of OTC derivatives as 1-2% of their notional value. See *id.* The government uses a more conservative measure, estimating the financial risk as 3% of the notional value of OTC derivatives. See Concept Release, 63 Fed. Reg. 26114, 26115 (1998).

⁵ For capsule recountings of these two financial misadventures, see William K. Maready, Jr., Comment, *Regulating for Disaster: Federal Attempts to Control the Derivatives Market*, 31 **Wake Forest L. Rev.** 885, 887 - 89, 894 - 97 (1996).

⁶ For accounts of the Long Term Capital Management crisis, see Michael Siconolfi et al., *All Bets Are Off: How the Salesmanship and Brainpower Failed at Long-Term Capital*, **Wall St. J.**, November 16, 1998, at A1, and Anita Raghavan & Mitchell Pacelle, *To the Rescue? A Hedge Fund Falters, So the Fed Persuades Big Banks to Ante Up*, **Wall St. J.**, September 24, 1998, at A1.

⁷ Concept Release, 63 Fed. Reg. 26114 (1998).

⁸ *Id.*

⁹ See Omnibus Consolidated and Emergency Supplemental Appropriations Act, Pub. L. No. 105-277, § 760, 112 Stat. 2681, 2681-35 (1998).

¹⁰ For a detailed description of the process leading to the enactment of the 1974 amendments, focusing on the decision to create an independent futures regulator, see Roberta Romano, *The Political Dynamics of Derivative Securities Regulation*, 14 **Yale J. on Reg.** 279 (1997).

¹¹ See **S. Rep.** 93-1131, app. 2 (1974).

¹² 7 U.S.C. § 1a (1994).

¹³ 7 U.S.C. § 6 (1994).

¹⁴ See Romano, *supra* note 1, at 50 (noting that the first currency swap was written in 1979, interest rate swaps were created in 1981, and commodity and equity swaps were developed even more recently); Hu, *supra* note 1, at 1473 - 76 (explaining that the modern derivatives industry was made possible by financial science breakthroughs of the 1960s and 1970s, in particular the development of the Black-Scholes option pricing model in the early 1970s). Ironically, Myron Scholes, one of the two individuals responsible for the intellectual breakthrough that made the derivatives industry possible, was one of the leading figures at Long-Term Capital Management, the hedge fund that suffered historic losses in August and September 1998 in the derivatives market.

¹⁵ See **S. Rep.** 93-1131, letter from Donald L.E. Ritger, Acting General Counsel, Department of the Treasury, to Herman E. Talmadge, Chairman, Committee on Agriculture and Forestry (July 30, 1974).

¹⁶ 7 U.S.C. § 2(ii) (1994).

¹⁷ 54 Fed. Reg. 30,694 (1989).

¹⁸ See *id.* at 30,696 - 97.

¹⁹ 52 Fed. Reg. 47,022 (1987).

²⁰ See Romano, *supra* note 1, at 55.

²¹ See *id.*

²² 54 Fed. Reg. 30,694 (emphasis added).

²³ See 54 Fed. Reg. 30,694 - 95.

²⁴ See 7 U.S.C. § 6(c) (1994).

²⁵ 7 U.S.C. § 6(c)(5). Contrary to the assertion of some commentators, see, e.g., Romano, *supra* note 1, at 56, and industry representatives, Congress did not mandate that the CFTC exercise its exemptive authority with respect to swaps and hybrids; instead it stated that "the Commission *may* . . . exercise its exemptive authority." (emphasis added)

However, the grant of exemptive authority, combined with explicit mention in the statute of prompt use of the authority with respect to swaps and derivatives, suggests that Congress did intend the CFTC to exercise its authority with respect to these instruments.

²⁶ See 17 C.F.R. §§ 34, 35 (1999).

²⁷ See 17 C.F.R. § 35.2.

²⁸ See Exemption for Certain Swap Agreements, 58 Fed. Reg. 5587, n.13 and accompanying text (Jan. 22, 1993) (noting that the rulemaking exempting certain swaps from regulation under the Commodity Exchange Act did not a determination by the CFTC that such instruments are or are not covered by the terms of the Act).

²⁹ 63 Fed. Reg. 26,114 (1998).

³⁰ See *id.* at 26,120 - 22.

³¹ *Id.* at 26,114.

³² *Id.* at 26,114 - 15.

³³ *Hearings on the Over-the-Counter Derivatives Market Before the House Comm. On Agriculture, Subcommittee on Risk Management and Specialty Crops* (June 10, 1998) (statement of Brooksley Born, chairperson, CFTC).

³⁴ Brooksley Born, Remarks at the Fordham University School of Law 1999 Derivatives & Risk Management Symposium (Jan. 28, 1999), available at <<http://www.cftc.gov/opa/speeches/-born-42.html>>.

³⁵ *See id.* Chairperson Born has recently announced her resignation. *See CFTC's Born Won't Seek New Term as Chairwoman*, **Wall St. J.**, Jan. 20, 1999, at B15.

³⁶ *See Hearings*, *supra* note 33.

³⁷ *Id.*

³⁸ *See id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ For an in-depth discussion of these jurisdictional battles written from the perspective of a former CFTC commissioner, see 2 **Philip McBride Johnson & Thomas Lee Hazen, Commodities Regulation** § 4.05 (3rd ed. 1999). *See also* John C. Coffee, Jr., *Competition Versus Consolidation: The Significance of Organizational Structure in Financial*

and Securities Regulation, 50 **Bus. Law.** 447, 460 - 73

(1995).

⁴² See Coffee, *supra* note 41, at 460 - 61 (noting that the SEC "has continually tried to gain authority from the CFTC, but has had only limited success, which has been confined largely to the context of stock index futures").

⁴³ See **Johnson & Hazen**, *supra* note 41, § 4.05[10], at 4-69.

⁴⁴ Although the jurisdictional issues faced by Johnson during his tenure as CFTC chairperson did not primarily involve OTC derivatives (such derivatives were in their infancy at the time), he does briefly address jurisdiction over OTC derivatives in his treatise. He describes OTC derivatives as a "profound jurisdictional challenge" to the CFTC, and notes that OTC derivatives "compete with" and "often resemble" exchange-traded derivatives. *Id.* § 4.05[9], at 4-68. Johnson's comments suggest a working assumption on his part that OTC derivatives are functionally equivalent to exchange-traded derivatives, and therefore naturally should, like exchange-traded products, be regulated directly by the CFTC. He concludes: "Looking into the twenty-first century, these "over-the-counter" products and dealers may represent a greater challenge to the Commission . . . than all of the past inter-agency skirmishes combined." *Id.*

⁴⁵ See, e.g., *Hearings on Derivatives Market Regulation Before the Senate Comm. on Agriculture, Nutrition, and Forestry* (July 30, 1998) (statement submitted by the International Swaps and Derivatives Association) (noting that swap transactions are customized and privately negotiated, that swap parties assume the credit risk of their counterparties, and that swaps are not capable of being systematically traded on an exchange floor).

⁴⁶ For an overview of the OTC derivatives industry's concerns regarding legal uncertainty, see *Hearings, supra* note 45 (statement submitted by the International Swaps and Derivatives Association).

⁴⁷ See *Transnor (Bermuda) Ltd. v. BP North America Petroleum*, 738 F. Supp. 1472 (S.D.N.Y. 1990).

⁴⁸ See Romano, *supra* note 1, at 52 - 53.

⁴⁹ *Hearings on Regulation of Derivatives Before the House Comm. on Banking and Financial Services* (July 17, 1998) (testimony of Dr. Robert J. Mackay, Vice President, National Economic Research Associates).

⁵⁰ *Hearings, supra* note 45 (statement submitted by the International Swaps and Derivatives Association).

⁵¹ *Hearings, supra* note 49 (testimony of Dennis Oakley, Managing Director, the Chase Manhattan Bank).

⁵² *Hearings, supra* note 49 (testimony of John C. Coffee, Jr., Adolf A. Berle Professor of Law, Columbia University Law School).

⁵³ *Hearings on Regulation of Derivatives Before the House Comm. on Banking and Financial Services* (July 24, 1998) (testimony of Douglas E. Harris, Esq., Arthur Andersen LLP).

⁵⁴ *See Hearings, supra* note 45 (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System).

⁵⁵ *Id.*

⁵⁶ *See id.* For an argument that institutional investors trading in complex derivatives, who rely on their sophistication in arguing for government deregulation of their activity, should not then enjoy the right to sue their brokers (claiming that they were not aware of the risks involved in their derivatives dealings) when they suffer significant losses, see Jerry W. Markham, *Protecting the Institutional Investor - Jungle Predator or Shorn Lamb?*, 12 **Yale J. on Reg.** 345 (1995).

⁵⁷ *See Hearings, supra* note 49 (statement of Mark C. Brickell, submitted on behalf of J.P. Morgan & Co.).

⁵⁸ *See id.*

⁵⁹ *Hearing on Systemic Risks to the Global Economy and Banking System from Hedge Fund Operations Before the House Committee on Banking and Financial Services* (October 1,

1998) (testimony of Alan Greenspan, Chairman, Federal Reserve Board).

⁶⁰ *Id.*

⁶¹ See Romano, *supra* note 10.

⁶² See Coffee, *supra* note 41, at 481 - 82.

⁶³ *Id.* at 470.

⁶⁴ See Siconolfi, *supra* note 6.

⁶⁵ See *Hearing, supra* note 59 (testimony of Alan Greenspan, Chairman, Federal Reserve Board). See also Steven Lipin et al., *Bailout Blues: How a Big Hedge Fund Marketed Its Expertise and Shrouded Its Risks*, **Wall St. J.**, Sept. 25, 1998, at A1 (quoting Stephen Modzelewski, a hedge fund manager) ("[Long-Term Capital's] lenders 'were not requiring adequate capital to support the risk-taking activities. Nobody was asking if there was any good-faith money behind the trades; they were just assuming there were Ph.D.s. To a certain extent, I think Wall Street had stardust in its eyes.'").

⁶⁶ Raghavan & Pacelle, *supra* note 6.

⁶⁷ See *Hearings on the CFTC Before the Senate Agriculture Comm.* (Dec. 16, 1998) (statement of Patrick M. Parkinson, Associate Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System).

⁶⁸ For a detailed account of the Federal Reserve's role in learning of and addressing the near-collapse of Long-Term Capital Management, see *Hearings, supra* note 59 (testimony of William McDonough, President, New York Federal Reserve Bank).

⁶⁹ See, e.g., Editorial, *Moral Hazard Revisited*, **Wall St. J.**, Oct. 2, 1998, at A14; James K. Glassman, Op-Ed, *Reckless Bailouts*, **Wash. Post**, Sept. 29, 1998, at A17. But see Daniel R. Fischel & Randal C. Picker, *Manager's Journal: A Firm That Failed Well*, **Wall St. J.**, Oct. 12, 1998, at A18 (commending the Federal Reserve's actions during the Long-Term Capital crisis, and arguing that "moral hazard" arguments are overstated in this case and ignore the rational desire of creditors to have financially distressed firms' assets sold in an orderly manner).

⁷⁰ The systemic risk posed by OTC derivatives trading is discussed more fully below in Part V.

⁷¹ **S. Rep.** 93-1131 (Aug. 29, 1974).

⁷² *Id.* app. IX.

⁷³ *Id.* app. IX. n.1.

⁷⁴ **S. Rep.** 93-1131, letter from Donald L.E. Ritger, Acting General Counsel, Department of the Treasury, to Herman E. Talmadge, Chairman, Committee on Agriculture and Forestry (July 30, 1974).

⁷⁵ *Id.*

⁷⁶ *See Hearings, supra* note 45 (statement of Lawrence H. Summers, Deputy Secretary of the Treasury) ("It is our view . . . that swaps are not futures under the CEA.").

⁷⁷ *See Coffee, supra* note 41, at 458 - 60.

⁷⁸ *Hearings, supra* note 45 (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System) (emphasis added).

⁷⁹ For a discussion of forward contracts, see Romano, *supra* note 1, at 7 - 10. Romano defines futures contracts as "standardized forward contracts," which are "readily transferable" and "are publicly traded on exchanges." *Id.* at 10.

⁸⁰ **S. Rep.** 93-1131, letter from Donald L.E. Ritger, Acting General Counsel, Department of the Treasury, to Herman E. Talmadge, Chairman, Committee on Agriculture and Forestry (July 30, 1974).

⁸¹ For the proposed language, see *id.* For the Treasury Amendment as enacted, see 7 U.S.C. § 2(ii) (1994).

⁸² **S. Rep.** 93-1131 (Aug. 29, 1974).

⁸³ *See Coffee, supra* note 41, at 461 - 62.

⁸⁴ *See Hearings, supra* note 45 (testimony of Brooksley Born, Chairperson, Commodity Futures Trading Commission), n.35 and accompanying text.

⁸⁵ **H. Rep.** 97-565(I) (May 17, 1982).

⁸⁶ **S. Rep.** 102-22 (March 12, 1991).

⁸⁷ *See id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ 519 U.S. 465 (1997).

⁹¹ *See Dunn*, 519 U.S. at 468 - 70.

⁹² "[A] transaction in which the buyer purchases from the seller for consideration the right, but not the obligation, to buy or sell an agreed amount of a commodity at a set rate at any time prior to the option's expiration." *Id.* at 469.

⁹³ "[A]greements that anticipate the actual delivery of a commodity on a specified future date." *Id.* at 472.

⁹⁴ "[A]greements for purchase and sale of commodities that anticipate near-term delivery." *Id.*

⁹⁵ *See, e.g., id.* at 474 (discussing the Treasury Department's belief in "the need to exempt the foreign currency futures market from CFTC regulation").

⁹⁶ For an articulation of the industry view of the difference between forwards and futures, see Romano, *supra* note 1, at 7 - 10.

⁹⁷ *Dunn*, 519 U.S. at 470 (quoting *Hubbard v. United States*, 115 S. Ct. 1754, 1759 (1995)) (internal quotation marks omitted).

⁹⁸ *Id.*

⁹⁹ 7 U.S.C. § 6 (1994).

¹⁰⁰ *Dunn*, 519 U.S. at 473.

¹⁰¹ Oral Argument, *Dunn* (No. 95-1181), at 1996 WL 668331.

¹⁰² *See id.*

¹⁰³ *See* 54 Fed. Reg. 30694, 30694 - 95 (July 21, 1989).

¹⁰⁴ *See S. Rep.* 102-22 tbl.B (March 12, 1991).

¹⁰⁵ *Hearings*, *supra* note 49 (testimony of John C. Coffee, Jr., Professor of Law, Columbia University Law School).

¹⁰⁶ *See, e.g.,* Maready, *supra* note 5, at 913 - 914 (noting that the most highly-publicized examples of default on derivatives contracts, such as the Barings Bank and Orange County bankruptcies, did not create systemic risk); Cohen, *supra* note 1, at 2009 - 10 (comparing concern over systemic risk from the use of OTC derivatives to concern over "the possibility that our atmosphere will be destroyed by a great asteroid"). *Cf.* Adam Waldman, Comment, *OTC Derivatives & Systemic Risk: Innovative Finance or the Dance Into the Abyss?*, 43 **Am. U. L. Rev.** 1023, 1053 - 58 (1994) (finding that OTC derivatives had not yet created systemic risk, but that they might in the future; and recommending private, rather than governmental, action to address the possibility of future systemic risk).

¹⁰⁷ *Hearing, supra* note 59 (testimony of William McDonough, President, New York Federal Reserve Bank).

¹⁰⁸ *Id.* (testimony of Alan Greenspan, Chairman, Federal Reserve Board).