September 17, 2004

Patrick J. McCarty
General Counsel
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street N.W.
Washington, D.C. 20581

Re: CME Interpretation of Rule 432.D: Submission No. 04—61(a)

Dear Mr. McCarty

On July 9, 2004, Chicago Mercantile Exchange Inc. ("CME") submitted the following explanation for its Interpretation of Rule 432.D. ("CME Interpretation"):

> "CME's interpretation of Rule 432.D governs certain prearranged transactions that involve both a trade and a reversal of a trade whereby a trader does not incur market risk or change its market position. If the reversal of the transaction is an independent event, it is not defined as a wash trade or other form of fictitious trading. This interpretation was adopted to clarify the misapprehension of certain attorneys that a wash trade, as defined by the CFTC and the CME, did not include transactions that made use of the facilities of more than one board of trade. This interpretation is intended to alert market users that CME's prohibition against fictitious trading may not be avoided by reversing the transaction on a different board of trade.
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> "The CFTC's definition of a "wash trade" is as follows:
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> 'Wash Trading: Entering into, or purporting to enter into, transactions to give the appearance that purchases and sales have been made, without incurring market risk or changing the trader's market position. The Commodity Exchange Act prohibits wash trading. Also called Round Trip Trading, Wash Sales.'"

You asked that CME respond to Mr. Hahn's August 13, 2004 letter, submitted on behalf of LIFFE Administration and Management ("LIFFE"), challenging CME's Interpretation. LIFFE questions CME's right to promulgate a rule interpretation confirming that its longstanding prohibition against fictitious trading may not be circumvented by the subterfuge of splitting the fictitious trade between two exchanges or clearing houses. CME's view of the scope of its rule is consistent with the Commission's decision respecting wash trading in the energy market where the traders executed half the transaction on an electronic platform and half by telephone. As noted by Mr. Hahn, CME issued and self-certified its Interpretation of Rule 432. D. shortly after another of Mr. Hahn's clients completed two large fictitious trades using CME's block trading facility for one side of the transaction and LIFFE's Basis Trading Facility for the other. Mr. Hahn's client LIFFE paid Mr. Hahn's FCM client approximately $100,000 to compensate it for the costs of these transactions.

LIFFE's objection is based on: an incorrect interpretation of Core Principle 18[1]; a misconstruction of "unreasonable restraint of trade" under U.S. antitrust laws; a misunderstanding of the meaning of "incurring market risk"; an untenable construction of Commission precedent respecting the definition of a wash trade; failure to understand the right of a designated contract market to shape its non-competitive trading rules in the best interests of preserving transparency and liquidity on its markets; and on a series of mistaken, unwarranted assertions regarding the purpose and impact of CME's Interpretation. We deal with each of these issues below.

I. LIFFE LACKS A LEGAL AND A FACTUAL BASIS FOR ITS ASSERTION THAT CME'S INTERPRETATION CONSTITUTES AN UNREASONABLE RESTRAINT OF TRADE.

It is essential to look behind the orchestrated complaints that CME's Interpretation is "anticompetitive" to the language of the Commodities Exchange Act ("CEA"), which takes precedence over the rhetoric of interested parties. The legislative purpose of Core Principle 18 (Section 5(d)(18) of the CEA) was to prevent exchanges from excusing violations of the antitrust laws by unwarranted assertions that the anticompetitive conduct was necessary to perform self-regulatory duties under the CEA. Core Principle 18 and its predecessors did not create new liabilities or duties. The language adopted by Congress makes this point very clearly.

> (18) Antitrust considerations - Unless necessary or appropriate to achieve the purposes of this chapter, the board of trade shall endeavor to avoid -
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> (A) adopting any rules or taking any actions that result in any unreasonable restraints of trade; or
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> (B) imposing any material anticompetitive burden on trading on the contract market.

[1] LIFFE misquotes Core Principle 18, which prohibits certain unreasonable restraints of trade, not as LIFFE would have it: "unreasonably restraining trading."

Core Principle 18 is titled "Antitrust Considerations" and invokes the language of the anti-trust laws. Its legislative history, dating back to 1974, makes clear that it invokes the antitrust laws to define its terms. Core Principle 18 pertains to rules that result in any unreasonable restraints of trade and material anticompetitive burdens as defined in the antitrust laws--not to actions that may disadvantage a competitor. Subparagraph (A) references antitrust law standards to determine whether there has been an unreasonable restraint. An exchange's refusal to adopt or interpret rules in a manner that might assist a competitor is not an unreasonable restraint of trade.

It is not anticompetitive for an exchange to refuse to enter into offset arrangements (formal or de facto) with another exchange. There are a plethora of cases, including recent Supreme Court cases, enunciating this basic principle of antitrust law. Most recently, for example, in *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLP,* 540 U.S. __, 124 S.Ct. 872, 157 L.Ed.2d 823 (2004), the Supreme Court emphasized that traditional antitrust principles recognize only very limited exceptions (none of which is implicated here) to the general and well-accepted proposition that there is no duty for CME to assist its rivals. 157 L.Ed. 2d at 838. The Supreme Court and lower federal courts have repeatedly held that the purpose of the antitrust laws is to protect competition, not allegedly aggrieved competitors like LIFFE. As the Supreme Court stated in *Spectrum Sports, Inc. v. McQuillan,* 506 U.S. 447, 458 (1993): "The purpose of the [Sherman] Act is not to protect businesses from the working of the market; it is to protect the public from the failure of the market. The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself." LIFFE fails to explain, as it must to demonstrate a restraint of trade, how CME's Interpretation harms consumers by raising prices or reducing output. *Ball Memorial Hospital, Inc. v. Mutual Insurance, Inc.,* 784 F.2d 1325, 1334 (7th Cir. 1986; emphasis in original)(antitrust injury "<u>means</u> injury from higher prices or lower output...."). Nor has LIFFE even suggested how CME's Interpretation causes an actual and substantial adverse effect on competition that outweighs its pro-competitive effects in prohibiting unlawful and misleading fictitious transactions. *See Chicago Board of Trade v. United States,* 246 U.S. 231, 238 (1918)(To determine whether conduct promotes or suppresses competition, "the court must ordinarily consider the facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable.").

The puerile view that any impediment to a competitor is an unreasonable restraint of trade does not deserve to be given any credence by the Commission. See, *NYMEX v. Intercontinental Ex., Inc.*, 323 F.Supp.2d 559 (S.D.N.Y. 2004)

Moreover, in this instance the question of whether or not CME's Interpretation constitutes an unreasonable restraint of trade is not relevant. Core Principle 18 begins with the clause, "Unless necessary or appropriate to achieve the purposes of this chapter." This means that the antitrust considerations do not apply when the action is necessary or appropriate to achieve the purposes of the CEA. One of the explicit purposes of the CEA is to prevent fictitious, wash trading. If a rule or rule interpretation is "appropriate" to achieve that purpose, the antitrust consideration portion of Core Principle 18 does not come into play. Section 4c(a) clearly prohibits wash trades, accommodation trades and fictitious trades. It prohibits the reporting of prices that are not true and bona fide prices. CME's Interpretation of its existing rule prohibiting conduct forbidden by the CEA, is exempt from any limitations in subparagraphs A and B. The CME Interpretation is fully consistent with the CME's obligation to take affirmative steps to prevent violations of the CEA involving the reporting of fictitious transactions and prices.

Finally, subparagraph (B) is not applicable. It pertains to a rule of a board of trade that imposes anticompetitive burdens on the participants trading on the contract market that adopts the rule. Note that it does not refer to 'trading on "another" contract market." The actual clause pertains to restrictions "on trading on *the* contract market."(emphasis supplied) This clause was intended to prevent an exchange from discriminating among its own members in respect of trading on its markets.

As noted above, LIFFE misreads Core Principle 18 to preclude actions that *unreasonably restrain trading* rather than actions that constitute an unreasonable restraint of trade. But even under LIFFE's untenable reading, CME's Interpretation is appropriate. As a matter of fact and logic, CME's rule Interpretation does not *unreasonably* restrain trading at LIFFE or any other exchange—in fact, it does not restrain trading. LIFFE's complaint has nothing to do with trading. The transactions describe in LIFFE's letter were not executed on LIFFE, they were block traded in the back office of Mr. Hahn's FCM client and submitted to LCH.Clearnet Limited ("LCH").

The Interpretation does not constrain any market participant from trading Eurodollar futures contracts, or any other contract at LIFFE or any other exchange. If Mr. Hahn's clients want to trade on LIFFE in the first instance, they are free to do so. If they wish to do block trades and clear them through LCH, they are free to do so. If LIFFE wants to permit fictitious trades to create an appearance of volume, it needs to answer to its regulator and the Commission—not CME. CME's Interpretation does nothing to influence where Mr. Hahn's clients are able place legitimate trades.

This dispute is not about freedom to trade, it is about freedom to clear and to free-ride the price discovery provided by CME's investment in technology and the skill of its committed market makers. LIFFE, implicitly concedes that this is the real issue. LIFFE's explicit objection to CME's Interpretation is that a trader with a position at CME,

> "wishing, for example, to gain margin offset opportunities now available at LCH.Clearnet Limited ("LCH")/LIFFE by moving his large Eurodollar position from CME to LIFFE is forced to trade a block size position through the non-block

market with the attendant transaction costs and uncertainties. Confronted with this alternative, the Interpretation essentially locks the position at the CME."

LIFFE's admission as to its real complaint is welcome: its factual assertions and conclusion are wrong. Margin offsets do not necessarily require moving positions. A large majority of the traders who "hold large Eurodollar" positions at CME and who seek to gain margin offset opportunities between CME and LCH's Euribor may do so directly. A cross-margining agreement is in place between the two clearing organizations; it has been effective for many years and is currently being used by a number of firms. CME has not been asked by LCH to expand the scope of the program to cover non-proprietary accounts, but would be pleased to move forward with such a program if the Commission approves and LCH were willing to bear the significant costs.

Traders who want to exit their position at CME are not "forced to trade a block size position through the non-block market . . . ." There are a number of other real choices available to traders who seek to cross-margin Eurodollars and Euribor. If a trader who is not eligible for cross-margining treatment wishes to gain margin offset opportunities that are not available at CME, it need not place its position at CME in the first place. If the trader already has a position at CME, there is sufficient liquidity on GLOBEX and in CME's pits to trade out of the position at genuine market prices better than the block price and then to reestablish the position at LCH by whatever non-competitive means LIFFE encourages to pump up its open interest. CME's markets for the combination positions that were involved in these transactions are incredibly deep.

Finally, if the trader is convinced by an FCM that it is better to let the FCM internalize the trade, the trader can do a legitimate block at CME and an unrelated block at LIFFE. CME's Interpretation bars trades that do not subject a party to market risk. CME does not prohibit separate block trades buying and selling large lots if those block trades are not explicitly or implicitly prearranged to obviate the customer's or the firm's market risk.[2]

LIFFE dissimulates that the Interpretation does not permit such transactions: it is a lame effort to bolster its position. LIFFE claims: "The Interpretation bars as fictitious the use of CME's block trade facility for a transaction when that use is related to a transaction employing another exchange's block or basis trade facility." (Letter at 1) The Interpretation does not bar buying and selling by blocks—it bars fictitious trading where no market risk is incurred. Trader A is welcome to buy Eurodollars by means of block trades and immediately sell those Eurodollars at LIFFE by means of another block, but those offsetting blocks may not be prearranged to negate the trader's market risk.

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[2] A customer can easily avoid any stigma of wash trading by doing the block at CME with counter-party A and doing the block at LIFFE with an independent unrelated counter-party.

The obvious goal of Mr. Hahn's clients is to secure the Commission's assistance to revamp the structure of futures markets.[3] Apparently, Mr. Hahn's FCM clients recognize that LIFFE's Eurodollar markets are often illusory.[4] They apparently do not want to trade or leave their open positions at LIFFE and its clearing house without the safety-net of CME's liquidity. Those FCMs and their customers choose to use the CME's facilities to execute their Eurodollar orders in order to be assured of fair, reliable markets and, presumably, to capture all or a portion of the value of CME's advantageous bid-offer spread. Mr. Hahn's clients are asking the Commission to force CME to permit the transfer to LCH of open interest established by means of CME's reliable, liquid trading facilities. This is the exact same issue that the parties who support LIFFE's letter presented to the Commission without success two years ago.

On June 6, 2002, in the course of the Commission's *Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries*, the Futures Industry Association repeatedly pushed its agenda to involve the Commission in the "common clearing" and "clearing choice" debate. The Commissioners' reaction was uniform.

> CHAIRMAN NEWSOME: With regard, more specifically, to common clearing, again, when I look at that issue, I question what the role of the government regulators should be toward pushing common clearing.
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> COMMISSIONER ERICKSON: If I might, it just strikes me, I'm just kind of fascinated, that we've gone through this period of talking about market structures, and setting them up in a way to encourage competition. And today we're talking about: How do we provide that structure in the intermediary context? And some of the answers seem to be: We need to be imposing additional obligations, duties, and rules on the marketplaces themselves.
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> And we're looking at a new law, the CFMA, that has set up designated clearing organizations, a new area of regulation for the CFTC, envisioning multiple clearing organizations. And we're back to talking about the need for common clearing. And I'm really personally not sure what this agency has, as far as authority, to take action in that area.

CME has previously answered all of the arguments that have been advanced by the supporters of "clearing choice." A copy of CME's *White Paper* on the subject is appended hereto for your convenience. The Commission's refusal to upset CBOT's rule amendment

[3] A secondary goal is to further LIFFE's efforts to create the appearance of a liquid market by reporting large open interest. But if that open interest is the result of trading at CME and if it is liquidated by trading at CME, the appearance is misleading and injurious to customers.

[4] LIFFE's Eurodollar markets are a function of payment to market makers to create the appearance of deep liquid markets. LIFFE's markets completely evaporate at times of stress. After the recent announcement of payroll statistics, LIFFE's markets disappeared for 20 minutes.

transferring open positions to CME's clearing house is additional confirmation that an exchange may control the means by which its listed contracts are cleared.

CME provides integrated trading and clearing facilities for its listed Eurodollar futures contracts. CME has chosen a common business model: it sells execution and clearing as a package, not unlike Rolls Royce's choice to sell cars with steering wheels and tires. To the extent that CME's customers do not like this policy, they will be driven to trade elsewhere, for example at LIFFE. A customer that prefers an exchange that offers clearing choice has the option to trade at LIFFE, if LIFFE chooses to permit its customers a choice of clearing agency—which, despite its apparent championing of the concept, it does not. If CME's Interpretation were to have any impact on trading at LIFFE, that impact would be positive.

LIFFE interprets Core Principle 18 as precluding CME from taking any action that LIFFE judges to be contrary to its best interests. Based on the authority cited (none) and logic advanced (less) by LIFFE, if LIFFE were a DCO, CME could demand that the Commission intercede to prevent LIFFE: from buying the appearance of liquidity by payments to market makers who disappear in time of stress; buying open interest to convince market participants that LIFFE provides reliable liquid markets; and misrepresenting the source of LIFFE's settlement prices to demonstrate the reliability of its price discovery.[5] All such actions are "anticompetitive" under LIFFE's definition since they adversely impact CME's ability to ultimately prevail in a competitive battle with LIFFE.

II. CME's INTERPRETATION OF RULE 432.D. WAS A CORRECT RESPONSE TO WASH TRADING ACROSS MULTIPLE EXCHANGES.

Rule 432.D., which classifies creating or reporting a false or fictitious trade as a major offense, was adopted in an age where it was unusual for the same futures contract to be listed on multiple exchanges. There has never been an objection to that rule, nor could there be in light of CME's obligations to insure market integrity and prevent such transactions. The contours of the futures industry in which Rule 432.D. operated to prevent improper trading practices have changed and the rate of change is intensifying post CFMA. CBOT and EUREX both list the same mid- and long-term interest rate contacts. CME-listed contracts are traded by a broad cross section of exchanges, including LIFFE, SGX, CBOT, TIFFE, etc. The impact of this paradigm shift on CME's rule prohibiting fictitious trading was not fully appreciated until LIFFE paid more than $100,000 to offset the costs of some very large, prearranged, fictitious trades.

CME adopted the recent Interpretation of Rule 432.D. in response to the realization that inter-exchange fictitious trading was a significant threat in an era of internationalization and

[5] LIFFE claims to calculate its settlement prices based on its own markets and its model. As discussed in Section II, however, appears that LIFFE waits until CME publishes its settlement prices and uses CME's copyrighted settlement prices without permission or acknowledgement in violation of LIFFE's rules and U.S. copyright law.

multiple listing of futures contracts. The Commission's decisive response to cross-platform wash trading practices in the OTC energy markets also inspired CME's Market Regulatory Oversight Committee to unanimously approve this Interpretation. The Interpretation is as follows:

RULE 432.D. – INTERPRETATION

CME Rule 432.D. prohibits fictitious trades. A fictitious trade includes a prearranged transaction or series of transactions by means of which one or more parties engages in a transaction at CME and reverses that transaction at CME or at another board of trade. CME facilities that permit prearrangement of trades (Rule 526 – Block Transactions; Rule 538 – Transfer Of Spot For Futures; and Rule 539.C. – Pre-Execution Discussions Regarding GLOBEX Trades) may not be used to facilitate a fictitious trade as defined above.

There is no colorable basis to challenge this Interpretation. In fact, because globalization of futures markets offer better opportunities to deceive by means of multi-exchange wash trading, the Commission should be concerned by a DCO that does not adopt a similar Interpretation of its wash sale prohibition. Yet LIFFE, in an exercise of desperate overstatement insists, "No valid statutory purpose is served by the Interpretation." (Letter at 2)

LIFFE offers two explanations for its position: first, it claims that a wash trade requires some bad motive; second it asserts the bizarre position that a transaction that is prearranged to avoid incurring "market risk" is not a wash trade if the contracts are cleared at different clearing houses or if different laws apply. The LIFFE Eurodollar contract is identical to CME's in terms of the specifications and in terms of its settlement pricing. LIFFE makes the following claim on its web site as to the manner in which its settlement prices are calculated:

> http://www.liffepacksandbundles.com/packsandbundles.aspx
>
> **The determination of the daily settlement price**
> The key to the variation margin process is the Exchange's determination of an accurate daily settlement price for each and every futures and options contract. If at settlement there is insufficient trading volume to observe the settlement price, the Exchange officials will use the price generated by the Exchange pricing model, pertinent to the futures or options contract, which is based on prices from the underlying market. Settlement prices are automatically transmitted to member back offices.

Contrary to LIFFE's claim to independently calculated settlement prices, LIFFE routinely infringes CME's copyrighted settlement prices in order to insure that the two markets move in lock step. The attached comparison of settlement prices for LIFFE and CME illustrates this point. Beginning on June 1, 2004: On 32 of 34 days there is a perfect match between CME and LIFFE settlements; except for one day, 99.85% of the time LIFFE exactly duplicates CME settlements. LIFFE lacks any basis for settling the third, fourth and fifth years: LIFFE has no bids, offers or trades in those contracts. It is obvious that LIFFE misappropriated CME's copyrighted settlement information to eliminate the risk of arbitrage between CME and LIFFE.

LIFFE's view that using two clearing houses escapes the wash trade prohibition, if adopted, is an invitation to all of those scammers, still at large but held at bay by the Commission's recent aggressive actions against wash trades in the energy market. On a number of occasions, the Commission has found that prearranging the purchase and sale on two distinct systems does not avoid the wash sale prohibition. See *In the Matter of Byron G. Biggs*, CFTC Docket No. 04-22:

> "WASHINGTON, D.C. -- The U.S. Commodity Futures Trading Commission (CFTC) today announced the filing and simultaneous settlement of charges against Byron G. Biggs, a former trader for BP Energy Company, for engaging in illegal wash trading on an electronic trading platform. Biggs has agreed to cooperate with the CFTC's Division of Enforcement.
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> The CFTC order, issued on August 11, 2004, finds that on six occasions between April and June 2000, Biggs executed prearranged trades for electricity contracts at identical prices. On each occasion, according to the order, Biggs agreed to execute a buy or a sell order on the electronic trading platform and then immediately to reverse the transaction by bilaterally executing by telephone an equal and opposite buy or sell. The order finds that these trades resulted in a financial nullity." CFTC Release: 4967-04 (August 11, 2004)
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> See also *In the Matter of Joseph B. Knauth, Jr.*, CFTC Docket No. 04-15.
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> "WASHINGTON, D.C. -- The U.S. Commodity Futures Trading Commission (CFTC) today announced the filing and simultaneous settlement of charges against Joseph B. Knauth, Jr., a former electricity trader, for engaging in illegal wash trading on an electronic trading platform.
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> The CFTC order, issued on May 10, 2004, finds that on five occasions between April and June 2000, Knauth executed prearranged trades for electricity contracts at identical prices. On each occasion, according to the order, Knauth agreed to execute a buy and a sell order on the electronic trading platform and immediately to reverse the transaction by bilaterally executing over the telephone an equal and opposite buy and sell. The order finds that these trades resulted in a financial nullity." CFTC Release: 4925-04 (May 10, 2004)

It is unlikely that anyone in the enforcement business would accept LIFFE's view that there is a safe-harbor for wash trades if you do half at the NYMEX and clear the remainder in London. It is unlikely that anyone who trades energy shares LIFFE's view.

LIFFE's real problem with the Interpretation is very much more limited than its arguments. LIFFE would be satisfied if CME carved out an exception to its rule against wash trading in every case where the motive of the party includes moving an open position from CME to LIFFE. This demand is just plain silly. A "good motive," and we do not agree that moving open interest in order to influence traders to use a particular exchange qualifies as a good motive, can always be found for wash trading. In the good old days, the traders always explained away their conduct as merely a legitimate effort to avoid delivery obligations, or to avoid margin calls, or to avoid capital violations. See *In the Matter of Gary Glass and Zoltan Guttman*, CFTC Docket No. 93-4 (April 27, 1998).

The judicial and administrative authority has been clear and consistent. A purported business motive does not excuse a wash trade. The motive of the trader is not an issue. All of the Commission's statements of the legal principles governing its finding that a wash trade case has been sustained are consistent and do not require proof of intent to impair market integrity.

In *In the Matter of Olam International Ltd:* CFTC Docket No. 04-13 (April 15, 2004) the customer explained that it had a legitimate commercial purpose, offsetting positions that were held at different clearing firms, for its transaction. Moreover, the customer seems to have had a legitimate alternative means to accomplish its goal, which it failed to pursue out of ignorance. The Commission refused to accept that defense and reiterated its view of the legal standard as follows:

> Section 4c(a) of the Act makes it "unlawful for any person to offer to enter into, enter into, or confirm the execution of a transaction" that "is of the character of, or is commonly known to the trade as, a 'wash sale' . . . ." The central characteristic of a wash sale is the intent to avoid making a *bona fide* transaction or taking a *bona fide* market position. *In re Citadel Trading Co. of Chicago, Ltd.*, [1986-1987 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶23,082 at 32,190 (CFTC May 12, 1986).
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> The factors that indicate a wash result are (1) the purchase and sale (2) of the same delivery month of the same futures contract (3) at the same (or a similar) price. *In re Gilchrist*, [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,993 at 37,653 (CFTC Jan. 25, 1991). Here, Olam bought and sold the same delivery month of the same futures contract at the same price in two delivery months on June 13, 2002 (*i.e.*, 345 July 2002 cocoa futures contracts at 1475 per contract and 345 March 2003 cocoa futures contracts at 1465 per contract) and again in two delivery months on July 10, 2002 (*i.e.*, 450 September 2002 cocoa futures contracts at 1780 per contract and 450 December 2002 cocoa futures contracts at 1761 per contract).

Nonetheless, in addition to these factors, the liability of the customer initiating the wash sale depends upon evidence demonstrating that the customer intended to negate market risk or price competition. *In re Piasio*, [1999-2000 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 28,276 at 50,685 (CFTC Sep. 29, 2000). Market risk or price competition is negated "when it is reduced to a level that has no practical impact on the transactions at issue." *In re Gimbel*, [1987-1990 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 24,213 at 35,004 n.7 (CFTC Apr. 14, 1998), *aff'd as to liability*, 872 F.2d 196 (7th Cir. 1989). Similarly, the liability of a participant in the wash sale depends upon the demonstration that the participant knew, at the time he chose to participate in the transaction, that the transaction was designed to achieve a wash result in a manner that negated risk. *In re Bear Stearns & Co.*, [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,994 at 37,665 (CFTC Jan. 25, 1991).

While the intent to avoid a *bona fide* market position can properly be inferred from prearrangement, it can also be inferred "from the intentional structuring of a transaction in a manner to achieve the same result as prearrangement." *In re Three Eight Corporation*, [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶25,749 at 40,444 n.15 (CFTC Jun. 16, 1993) (citing *In re Collins* [1986-1987 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶22,982 at 31,900-01 (CFTC Apr. 4, 1986), *rev'd on other grounds sub. nom. Stoller v. CFTC*, 834 F.2d 262 (2d Cir. 1987) ("*Collins I*")). "In an individual transaction . . ., a trader may avoid a *bona fide* market transaction in many instances merely by structuring the buy and sell orders so that they are simultaneous, or practically so, and by signaling . . . , directly or indirectly, that a price match is the objective of the transaction." *Collins I*, ¶ 22,982 at 31,900-01.

The only question discussed by the courts and the Commission is whether the trader intended to secure a wash result—meaning to buy and sell without incurring market risk. It is no defense that the trader had a business purpose: no prosecutor is required to prove that the trade hurt a customer or the market. CME's prohibition against fictitious trading has never included an exception for good motive or required CME's compliance staff to prove bad motive. Yet LIFFE demands that CME adapt its Interpretation to permit trades in which the parties incur no market risk if the "motive" cannot be proved to be bad. LIFFE's demand is bad law and worse policy.

Very truly yours,

Jerrold E. Salzman

cc: CFTC Commissioners
CFTC Directors
Craig Donohue
Nicholas Carew-Hunt
Arthur W. Hahn

WHITE PAPER
Legal Issues Respecting "Directed Clearing"

Several of the largest investment banks are using their trade association, the Futures Industry Association ("FIA"), to campaign for government intervention to restructure the U.S. futures industry. Their motive for this campaign is obvious: these banks, which invested in new derivative exchanges and clearing houses that have closed or failed to gain significant market share, are trying to increase their revenues at the expense of certain exchanges, public customers and other exchange members.[1]

FIA's plan, variously styled as "Freedom to Clear," "Directed Clearing," "Open Architecture Clearing," and "Clearing Choice," is to force futures exchanges to truncate the services that they offer to their customers by giving up control over the clearing function that provides the financial, banking and delivery services that guarantee performance of futures contracts. Exchange control of these services – either in-house or through a dedicated third party -- is at the heart of current efforts to improve the value of exchange services by offering straight-through, integrated processing to clearing member firms and their clients. FIA's ultimate goal is a government-mandated common clearing utility, which will eliminate unique exchange offerings and permit investment banks to internalize customer orders and/or secure payment for order flow. FIA's justification for government action is founded on a misinterpretation of the Commodity Exchange Act and a mistaken assumption that the antitrust laws require successful firms to help new market entrants gain market share. FIA offers no justification for the blatant appropriation of private property contemplated by its proposal.

Chicago Mercantile Exchange ("CME") has discussed the economic issues at length in its August 1, 2002, letter to the Commodity Futures Trading Commission. (Attached) The legal grounds upon which the FIA has founded its arguments are the subject of this White Paper.

At recent CFTC Roundtable discussion, Mr. John Damgard, President of the FIA remarked in reference to various futures exchange representatives: "I do think we have totally different definitions of competition."[2] In that regard, we are certainly agreed. Mr. Damgard's notion of competition is that each seller is compelled to market products that are precisely identical, i.e., fungible, with the products of every other seller. Mr. Damgard's view of competition is a homogenized, generic, faceless world where product innovation and enhanced process functionality is devalued—where all futures exchanges offer precisely the same products and the only issue is cost. In this world, General

[1] The FIA leaders backing this campaign are board members of one of those new exchanges and board members of the clearinghouse that they expect to benefit from government mandated common clearing. Compare the board composition of BrokerTec, BOTCC and FIA.
[2] Statement of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Roundtable on Derivatives Clearing Organizations," August 1, 2002.

Motors and Ford are required to agree on specifications to avoid competition on anything other than price.

It is only through differentiation that product innovation is accomplished. Differentiation with respect to product and the delivery of that product has been a fundamental tenet of CME's business strategy and, intuitively, a prerequisite for product advancement. CME opposes any suggestions to impede its ability to explore new opportunities in non-generic, unique products – accessible through unique value added trading platforms – cleared and settled on an essentially "straight-through," integrated basis. The FIA's view of competition is the antithesis of the antitrust policy of the United States.

The FIA's legal arguments rest on the ludicrous proposition that it is anticompetitive to refuse to lend aid and assistance to the competition or to compete on terms other than price. Thus it labels, "anticompetitive" CME's refusal to enter into multilateral mutual offset arrangements that permit FCMs to transfer positions to the clearinghouse of their choice. FIA equates the speculative impact on the business plans of start-up exchanges owned by FIA leaders with the injury to competition prohibited by the antitrust laws. FIA implicitly rejects any consideration of CME's competitive interests or of the costs that will be imposed if clearinghouses are forced to create and administer multiparty mutual offset systems.

The spokesmen for the FIA have cited Section 5b (c) (2) (N) of the Commodity Exchange Act to demonstrate that the CEA requires clearing organizations designated by the CFTC, known as DCOs for designated clearing organization, to act contrary to their own best competitive interests and to support the business needs and aspirations of competing clearinghouses and exchanges. The argument hinges on a basic misconception of the meaning of "restraint of trade" and "anti-competitive burden." Section 5b (c) (2) (N), one of the core principles with which a DCO must comply to remain registered, provides as follows:

(N) **Antitrust considerations**

> Unless appropriate to achieve the purposes of this chapter, the derivatives clearing organization shall avoid -
> **(i)** adopting any rule or taking any action that results in any unreasonable restraint of trade; or
> **(ii)** imposing any material anticompetitive burden on trading on the contract market.

Each of the subparts explicitly adopts language from the antitrust laws under a heading that references those laws. Subpart (i) is general in nature and applies to any rule or action taken by a DCO. The restriction imposed uses language that is well understood and highly specific. Congress's reference to an "unreasonable restraint of trade" invokes the massive body of precedent and authority defining that term. Unlike the spokesmen for the FIA, every antitrust practitioner understands that a prohibition against an "unreasonable restraint of trade" is not intended to preclude a competitor from taking any lawful action to better its own competitive position without regard to the impact of the action on competitors. The antitrust laws protect competition, not competitors. *Brown Shoe Co. v. United States*, 370 U.S. 294, 320, 8 L. Ed. 2d 510, 82 S. Ct. 1502 (1962).

Subpart (ii) does not apply to the issue being argued by the FIA. It is intended to prohibit BOTCC, the Board of Trade Clearing Corporation, and other similar outsourced DCO's from imposing material anticompetitive burdens on the contract markets for which they perform clearing services. So, if BOTCC, which is the DCO for the Chicago Board of Trade, refused to clear a Chicago Board of Trade product without any legitimate reason and if this imposed a material burden on competition in such product, subpart (ii) might be invoked.

FIA spokesmen also rely upon Section 5b (f) as authority for the Commission to compel DCOs regulated by the Commission to form linkages that would permit fungiblity among futures contracts traded on separate facilities. Section 5b (f) was enacted to ensure that the Commission had adequate power to facilitate voluntary linkages between DCOs regulated by the CFTC and regulated clearing facilities subject to the jurisdiction of other U.S. regulators. That section provides:

> (f) Linking of regulated clearing facilities
>
> > (1) In general
> >
> > The Commission shall facilitate the linking or coordination of derivatives clearing organizations registered under this chapter with other regulated clearance facilities for the coordinated settlement of cleared transactions.
> >
> > (2) Coordination
> >
> > In carrying out paragraph (1), the Commission shall coordinate with the Federal banking agencies and the Securities and Exchange Commission.

The obvious meaning, that the section relates to linkages between DCOs regulated by the Commission and "other regulated clearance facilities," is confirmed by the legislative history. First, Congress was well aware of how to legislate if it wished to compel coordination and linkage among clearinghouses subject to the same regulator. Section 17A of the Securities Exchange Act of 1934 (15 U.S.C. 78q-1) is a recent example of the extensive legislation that would have been adopted if Congress had intended to compel CME to link its clearing house to the Board of Trade Clearing Corporation so that the exchanges owned by the leaders of FIA could skim the cream of CME's transaction business.

The House Agriculture Committee Report is the only legislative history that explicitly deals with this section. At that stage of the drafting current Section 5b(f) was numbered 5b(g). The Report (House Report No. 106-711 (I) of the House Committee on Agriculture (June 29, 2000)) refers to the subsection in its entirety as follows:

> "Subsection (g) requires CFTC to facilitate and coordinate with other federal regulators with respect to clearing organizations registered under this Act and other registered clearing facilities."

This strongly confirms the obvious reading that the only purpose of this provision was to make sure the CFTC understood that it had to coordinate with the SEC and the Federal Reserve with respect to the clearing of instruments that could be traded by commodities futures markets but also by securities markets and/or banks. If there was any larger purpose behind Section 5b(f), it should have been stated in this Report. This Report was also the earliest one. Indeed, when the legislation was introduced by Senator Lugar in the Senate on June 8, 2000, the brief section-by-section analysis that was inserted into the record explained the derivatives clearing organizations provision in very brief terms and did not even refer to Section 5b(f). 146 Cong. Rec. S4820-03.

The FIA has not yet publicly articulated a number of arguments that have been privately circulated by some of its leaders asserting that the clearing policies of U.S. futures exchanges violate the antitrust laws. Two arguments have been circulated. First, the clearinghouse is an "essential facility" and therefore CME must grant competing exchanges access to its facilities. Second, CME's offer of transaction and clearing services as a single product constitutes a tying arrangement that violates the antitrust laws of the U.S.

The essential facilities argument is preposterous and may have been abandoned. That doctrine, which is highly controversial, requires that a monopolist control a facility that it denies to its competitors, without legitimate business justification and which its competitors cannot reasonably duplicate.[3] CME is not a monopolist; there are a large number of clearinghouses that its competitors can and do use; new clearinghouses are easily created; and CME has never refused to provide clearing services for competing exchanges. In fact, CME has aggressively attempted to sell its clearing services.

More new derivative clearing organizations have emerged in the last two years than in the previous twenty.[4] The creation of a new clearing house has never been easier—regulatory barriers have been eliminated, software and technology is easily acquired and many existing clearing houses offer turn-key facilities management. Clearing is hardly a facility that cannot be duplicated.

The current mantra seems to be that the coupling of clearing and trading constitutes a tying violation. A tying (or tie-in) antitrust violation occurs if a firm with market power in one product (the tying product) requires as a condition of buying that product that the customer also buy a second product (the tied product). There is no violation if the products are ordinarily sold as a unit. The traditional examples are right and left shoes and cars with steering wheels. As a matter of law and practice futures exchanges have always sold transaction and clearing services as a package and there is no practical way to do the business without packaging those services. Moreover, there is no tie-in liability in the CME's case where the use of CME clearing is clearly an important quality control factor. Until the passage of the CFMA, contract markets were directly responsible for all violations of the clearing agency that they chose to perform clearing

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[3] Pitofsky, Patterson, Hooks, *The Essential Facilities Doctrine Under U.S. Antitrust Law*, 70 ANTITRUST LAW JOURNAL 443, 448-49 (2002)

[4] See Appendix for information on existing and new CFTC registrants.

services for the market.[5] Under the current regime, designation criterion 5 of section 5(b) and core principle 11 of section 5(d) impose significant continuing burdens on DCMs to insure that the DCO's clearance and settlement of its transactions meet stringent Commission requirements and that minimum financial standards are enforced. These provisions are inconsistent with the FIAs demand that FCMs be permitted to choose the clearinghouse.[6]

The CME has an overwhelming argument that clearing is an integral part of the product it offers. Except for securities futures products, which may be cleared by an SEC and a CFTC regulated clearinghouse, no futures exchange permits its customers to choose the clearinghouse that will match and guarantee the trade. Futures exchanges either internalize the function or outsource it. In no case does the customer make the choice. The CME has chosen not to outsource because it believes that its control over the integrity of the clearinghouse creates a better product for its customers. This is a logical, competitive choice that is not precluded by the antitrust laws.

Apart from these two preemptive defenses, any assertion that there has been illegal tying must begin with an analysis of whether the party alleged to have tied has "market power" in the tying product. In this case the alleged tying product is transaction services in derivative contracts. The first step in this analysis is to determine the relevant market. This process begins by considering all economically reasonable substitutes for the alleged tying product within the geographic area in which customers transact business. After determining the relevant market, the market power test requires that the complainant show that the tying party controls at least 30% of the relevant market.

There is no case law or scholarly analysis that supports a claim that bundling transaction and clearing services is an illegal tying agreement. The D.C. Circuit's Microsoft decision dealt with a claimed tie of an operating system to software (a browser), and the court said that such ties require special treatment because software innovations must not be deterred. The key issue in that case was whether the tie involved separate products. Apart from that issue, however, the court applied conventional tying analysis. The defendant must have market power (Microsoft had monopoly power; the minimum for an illegal tie is 30%) in the tying market and the tie must adversely impact competition in the tied market.

The FIA bases its arguments on the unsupportable assumption that futures exchanges are not in direct competition with OTC derivative markets: "The exchanges have long felt threatened by the over-the-counter market when, in reality … I think we can put that argument to rest."7 This naked assertion, however, is followed by compelling evidence from the president of the FIA that the opposite is true. He went on to admit the interchangeable functionality of over-the-counter and exchange traded derivatives in his remarks – "that customer can go across the street … to do the business, whether it's over-the-counter, or whether it's taking that business to the exchange."

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5 P.M. Johnson, *Commodities Regulation,* § 2.73 (Vol I, 1982).

6 CFTC Regulation Pat 38, Appendices A and B.

7 Statement of John M. Damgard, President, Futures Industry Association, for the Commodity Futures Trading Commission Roundtable on Derivatives Clearing Organizations, August 1, 2002.

His description of customer choices makes it clear that the market includes all sources of derivative contracts and is global. He explained: “My biggest customer member 15 years ago was doing 95 percent of his trading in futures. And I spoke to him yesterday. And he said, yeah, we’re doing 75 percent cash now and occasionally we’re still in the futures market. And it’s cost across the board.”[8] The FIA has clearly admitted that cash and futures markets are substitutes and that costs dictate the competitive outcome. Moreover, the FIA asserts that “costs are higher in futures … because the competition, as we define it, is not there.”[9] The conclusion is clear and compelling. CME’s practice of offering a package consisting of transaction services and clearing is the standard of the industry and consistent with Commission requirements.

Conclusion: The FIA’s proposal will inhibit the ability of exchanges to compete for customer business by offering the best possible package of services. The ability of clearing houses to compete for the business of an exchange, as has been the practice, will be ended. The benefits of lower prices, innovation, market integrity, and cost efficiencies that now flow to public customers as a result of competition to provide the best markets and the best clearing system and services will be eroded or destroyed. An elite few investment banks stand to benefit from transferring all clearing to a monopoly that they control. The real purpose of the FIA’s proposal should be exposed and rejected in its entirety.

[8] Statement of Mr. John M. Damgard, Chairman and President, Futures Industry Association, “Roundtable on Derivatives Clearing Organizations,” August 1, 2002.
[9] Statement of Mr. John M. Damgard, Chairman and President, Futures Industry Association, “Roundtable on Derivatives Clearing Organizations,” August 1, 2002.

APPENDIX—CFTC REGISTRANTS

Derivatives Clearing Organizations Registered with the Commission Pursuant to the Commodity Exchange Act*

Clearing Organization	Exchange(s)	Date Designated	Remarks
Board of Trade Clearing Corporation (BOTCC)	Chicago Board of Trade (CBOT)	12/21/2000	BOTCC is an independent clearing organization owned by its clearing members that was formed in 1925.
BrokerTec Clearing Company, LLC (BCC)	BrokerTec Futures Exchange (BTEX)	6/18/2001	BCC is affiliated with BrokerTec Global, LLC and BTEX.
CME Clearing House	Chicago Mercantile Exchange (CME)	12/21/2000	The Clearing House exists within the Clearing Division of the CME.
EnergyClear Corporation	Commercial markets exempt under Section 2(h)	7/9/2001	EnergyClear is a non-profit Delaware corporation and is the first new DCO not affiliated with a trading facility to be granted registration by the Commission since the passage of the CFMA. It is headquartered in Houston, Texas and provides clearance and settlement services for over-the-counter energy derivatives contracts between eligible commercial entities on a principal-to-principal basis.
Guaranty Clearing Corporation (GCC)	Merchants' Exchange LLC	7/26/2002	GCC is a wholly owned subsidiary of the Board of Trade Clearing Corporation (BOTCC)
Intermarket Clearing Corporation (ICC)	Philadelphia Board of Trade (PBOT)	12/21/2000	
Kansas City Board of Trade Clearing Corporation	Kansas City Board of Trade (KCBT)	12/21/2000	The Kansas City Board of Trade Clearing Corporation is a wholly owned subsidiary of the KCBT.
London Clearing House (LCH)	Commercial markets exempt under Section 2(h) and other OTC markets	10/29/2001	LCH is the first offshore clearing organization to be granted registration since passage of the CFMA. It is one of two clearinghouses not affiliated with an exchange to be registered. LCH provides clearing and settlement services for several markets in the United Kingdom. As a registered DCO, LCH will be able to provide clearing and settlement services for its clearing members, both U.S. and foreign based, in over-the-counter (OTC) interest rate swap contracts through its SwapClear facility and in OTC energy derivatives contracts executed on commercial markets exempted under section 2(h) of the CEA.
MGE Clearing House	Minneapolis Grain Exchange (MGE)	12/21/2000	The Clearing House became a department of the MGE in 1977. It was formally a separate entity known as the Minneapolis Clearing Corporation.
New York Clearing	New York Board of Trade (NYBOT)	12/21/2000	NYCC is a separate corporation organized and existing under the Not-

Corporation (NYCC)	Cantor Financial Futures Exchange (CX)		for-Profit Corporation Law of the State of New York. NYCC took over clearing functions of the Commodity Clearing Corporation and the Commodity Futures Clearing Corporation of New York in 1999 that formerly cleared for the New York Cotton Exchange and Coffee, Sugar & Cocoa Exchange, Inc. respectively.
NYMEX Clearing House	New York Mercantile Exchange (NYMEX)	12/21/2000	The Clearing House is a division of NYMEX. The NYMEX Clearing House is in the process of absorbing COMEX clearing functions.
OnExchange Clearing Corporation	OnExchange Board of Trade (ONXBOT)	12/22/2000	OnExchange Clearing Corporation and ONXBOT are subsidiaries of OnExchange Inc.
The Options Clearing Corporation (OCC)	Various exchanges executing securities options in the U.S.	12/10/2001	OCC is a securities clearing agency registered under the Securities Exchange Act of 1934 that provides clearing and settlement services for securities options traded on national securities exchanges. As a registered DCO, OCC will now be able to provide clearing and settlement services for transactions in commodity futures contracts and options on commodity futures contracts.

* Section 5b(d) of the Act as added by the Commodity Futures Modernization Act of 2000 (CFMA) provides that derivatives clearing organizations (DCOs) shall be deemed to be registered under this section to the extent that the DCO clears agreements, contracts, or transactions for a board of trade that has been designated by the Commission as a contract market for such agreements, contracts, or transactions before the date of enactment of this section. This provision captures all futures clearing organizations that have ever cleared any futures contracts for designated contract markets before the CFMA became effective.

Updated October 3, 2002

Derivatives Clearing Organization Registration Applications Pending at CFTC

Date DCO Application Received	Clearing Organization	Location	Status/Staff Remarks
2/20/2002	Hedge Street, Inc.	Portola Valley, CA	

Boards of Trade Designated as Contract Markets (DCMs)

The following exchanges have been designated by the CFTC as contract markets under the Commodity Exchange Act.

Exchange	Date Designated	Year Established	Major Commodities	Remarks
AMEX Commodities Corporation (ACC)	12/21/2000*	1985	N.A.	All contracts are dormant. The ACC currently is not operational.
BrokerTec Futures Exchange (BTEX)	06/18/2001	2001	Government securities	BTEX is affiliated with BrokerTec Global, LLC and provides an electronic trading platform.
Cantor Financial Futures Exchange (CX)	12/21/2000*	1998	US Treasury and Agency notes.	The CX is a joint venture of the NYBOT and Cantor Fitzgerald & Co. CX provides a proprietary electronic trading platform.
Chicago Board of Trade (CBOT)	12/21/2000*	1848	Grains, US Treasury notes and bonds, other interest rates, and stock indexes.	CBOT was the first organized commodity exchange. Futures trading started in 1865 in agricultural commodities including wheat, corn, and oats.
MidAmerica Exchange (MIDAM)	12/21/2000*	1868	Soybeans, wheat, and corn	MIDAM is a subsidiary of the CBOT. It trades many of the same contracts traded on the CBOT, but with smaller contract sizes.
Chicago Mercantile Exchange (CME)	12/21/2000*	1919	Livestock, dairy products, stock indexes, Eurodollars and other interest rates, currencies	CME was originally known as the Chicago Butter and Egg Board, which was formed in 1898. It became the CME in 1919, trading futures on a variety of agricultural products.
Island Futures Exchange	02/19/2002	2000	Security futures products	Island Futures Exchange has not yet commenced trading.
Kansas City Board of Trade (KCBT)	12/21/2000*	1856	Wheat, natural gas, and stock indexes	KCBT was established by local Kansas City merchants in 1856 as a means of trading grain. Futures trading in grains began in 1876.
Merchants' Exchange (ME)	12/21/2000*	2000	Barge freight rates and energy products	ME was originally established in 1836 as a cash commodity market. In 2000, the ME was approved as a contract market under the name Merchants' Exchange of St. Louis. It operates as an electronic exchange.
Minneapolis Grain Exchange (MGE)	12/21/2000*	1947	Spring wheat	MGE was established by the Minneapolis Chamber of Commerce in 1881 as an organization designed to promote trade in grains and to prevent abuses. In 1947, it became the MGE.
Nasdaq LIFFE Markets Futures Exchange (NQLX)	08/22/2001	2001	Security futures products	NQLX is a joint venture of the Nasdaq Stock Market and the London International Financial Futures and Options Exchange (LIFFE).

New York Board of Trade (NYBOT)				NYBOT is the parent company of CSCE and NYCE. The Citrus Associates, FINEX, and NYFE are owned by NYCE. NYBOT was formed in 1998 when CSCE and NYCE merged.
Coffee, Sugar & Cocoa Exchange (CSCE)	12/21/2000*	1882	Sugar, coffee and cocoa	
New York Cotton Exchange (NYCE)	12/21/2000*	1870	Cotton	
New York Futures Exchange (NYFE)	12/21/2000*	1979	Currencies and stock indexes	
New York Mercantile Exchange (NYMEX)	12/21/2000*	1956	Energy products	NYMEX was founded in 1872 as the Butter and Cheese Exchange of New York. COMEX was founded in 1933 from the merger of the National Metal Exchange, the Rubber Exchange of New York, the National Raw Silk Exchange, and the New York Hide Exchange. Since 1994, COMEX has been a subsidiary of NYMEX.
The COMEX Division (COMEX)	12/21/2000*	1933	Metals	
OneChicago (OCX)	06/11/2002	2002	Security futures products	The OCX is owned by the CME, CBOT and the Chicago Board Options Exchange (CBOE).
OnExchange Board of Trade (ONXBOT)	12/22/2000	2000	Treasury securities	ONXBOT is an internet based electronic exchange that has not yet commenced trading futures or options.
Pacific Futures Exchange (PFE)	12/21/2000*	1986	N.A.	The PFE currently is not operational. The only authorized contract was the PSE Technology Stock Index future, for which trading was never initiated.
Philadelphia Board of Trade (PBOT)	12/21/2000*	1986	Currencies	The PBOT is a subsidiary of the Philadelphia Stock Exchange. There has been no trading since the end of 1999.
Twin Cities Board of Trade (TCBT)	12/21/2000*	1991	N.A.	The TCBT currently is not operational. The only authorized contract was the British Pound/Deutsche Mark Cross Rate future, for which trading was never initiated.

Boards of Trade Designated as Contract Markets Subject to Conditions

The following exchanges were designated by the CFTC as contract markets under the Commodity Exchange Act. However, under the CFTC's Designation Order each exchange's designation is subject to specific conditions; the exchange cannot commence trading until the conditions set forth in the Order are satisfied (links to exchange websites).

Exchange	Date Conditionally Designated	Major Commodities	Remarks
FutureCom (FCOM)	12/21/2000*	Livestock	FCOM is an internet based, electronic exchange. The specific designation conditions are set forth in the CFTC's approval Letter and Order.

Chicago Mercantile Exchange

Terrence A. Duffy
Chairman of the Board

James J. McNulty
President & Chief Executive Officer

August 1, 2002

Ms. Jean A. Webb
Office of the Secretariat
Commodity Futures Trading Commission
1155 21st Street, N.W.
Washington, D.C. 20581

RE: Statement before the Commission's
Roundtable on Derivatives Clearing Organizations

Dear Ms. Webb:

Chicago Mercantile Exchange ("CME" or "Exchange") is pleased to offer this statement regarding the issues that are slated to be discussed at the Commission's Roundtable on Derivatives Clearing Organizations on August 1, 2002.

It is our understanding that the Roundtable has been organized specifically in response to issues raised before the Hearing on Commodity Futures Trading Commission Rules Relating to Intermediaries on June 6, 2002. At that Hearing, the Commission heard testimony from a number of sources citing broad structural concerns regarding competition – or the perceived lack thereof – within the domestic futures industry. In particular, some have questioned the organizational structure of exchanges such as CME, which has operated a vertically integrated execution, clearing and settlement facility for approximately one hundred years.

As a preamble, let us underscore our continued, deep commitment to serve the needs of the futures trading community, including our important clearing member firms and their customers. We clearly recognize that the interests of the Exchange must be aligned with the interests of our customers in order to assure our mutual prosperity. Thus, this letter is offered in the hopes of promoting a full appreciation of the intent and strategies of CME to achieve a more complete alignment.

1. Competition

At the recent Hearing, Mr. John Damgard of the Futures Industry Association ("FIA") remarked – and we concur - that "competition … [is] … the best regulator." But he further observed that "[w]ith the exception of BrokerTec, we have seen remarkably little competition … [with respect to existing products] … at either the exchange or clearing organization level. The regulatory barriers to entry may have been removed, but the vigorous rivalry that we had hoped for has not broken out." [1]

As a possible means of encouraging competition, Mr. Damgard suggested two prescriptive remedies in the form of (1) fungibility; and (2) common clearing. Fungibility and common clearing are of course characteristic of the domestic securities industry – where standardized transactions on multiple trading platforms might be routed for clearance to a single clearing organization operated akin to a utility.

Before rushing headlong into any attempt to restructure our industry through the process of regulation, it is prudent to consider what we regard as "the three pillars of our legacy: financial integrity, liquidity and innovation." To succeed and to serve the best interests of the marketplace as a whole, we must be cognizant that "our legacy depends not on one or another … but on all three." [2]

Diversity of Business Models – CME has traditionally pursued a vertically integrated business model, housing all functions from product and marketplace development, promotion, trade execution, clearing and settlement under one roof. As such, Mr. Damgard's prescriptions for fungibility and common clearing – a business model where front-end functions are fragmented amongst a number of entities distinguished from a consolidated back-end service provider – might be regarded as an antithesis of sorts of the vertically integrated model practiced by CME.

Some have even likened the vertically integrated business model to that of a monopoly. But … "[o]ver the past three decades, almost every textbook example of a 'natural monopoly' has been shown to be anything but – not electricity generation, nor telecoms, nor lighthouses … What matters in these markets are not current market shares, but the possibility of new market entries. A firm, no matter how high its market share, will always be concerned about the possibility of new competitors stealing its clients, undercutting its prices, and destroying its profitability. In the final analysis, it will behave almost exactly as it would in a fully atomistic market. Market entry, however, is easy, or so the experience of the last few years has shown." [3]

Thus, we ask you to consider that *diversity* of business models – not homogeneity – is the keystone to true competition in any industry. If competition is indeed the best regulator, as we both agree, the vertically integrated model must be allowed to compete alongside any other

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[1] Statement of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

[2] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

[3] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.

business models that may be devised – including the security industry model featuring a "horizontally" aligned, common clearing facility.

Competition for Derivatives Business – Mr. Damgard has suggested that there is a dearth of serious competition with respect to existing futures contracts. We respectfully disagree to the extent that we are keenly aware of competition from any number of product offerings serving identical or similar purposes that CME products are designed to address within the derivatives marketspace.

Our flagship Eurodollar contract, for example, faces stiff competition from the extraordinarily large and successful market for over-the-counter ("OTC") interest rate swaps ("IRS") and from forward rate agreements ("FRAs"). In addition, we note that Eurodollar contracts have been offered on other domestic and foreign exchanges from time to time.

Our stock index contracts are offered under licensing agreements with index publishers that offer a limited degree of exclusivity. However, this exclusivity is far from comprehensive. In particular, our stock index markets are assailed by competition from options on the very same indexes offered on stock option exchanges; from Exchange Traded Funds ("ETFs"); from index-based mutual funds; and, OTC equity derivatives. Please consider that while various exchanges may offer stock index products based upon somewhat different underlying indexes, these indexes may represent the same essential underlying risks and therefore serve redundant economic purposes.

Our currency complex represents a relatively small slice of the currency derivatives marketplace – which is of course dominated by interbank trade of currency forwards, swaps and options. We further note that CME is hardly the sole exchange that offers currency futures – facing direct competition both domestically and abroad.

We note that even vocal proponents of measures such as common clearing recognize competition within the domestic futures industry – competition that is facilitated by the emergence of electronic trading systems … "We've got ICE coming in, in terms of energy. We've got BrokerTec, trying to copy financial instruments. We've got the Merchants Exchange, trying to do something on energy. We've got Island, trying to compete with One Chicago and QLX, even before equity futures get launched."[4]

Competition from the derivatives marketplace is incredibly stiff. In fact, statistics suggest that the futures industry is dwarfed by the magnitude of these competitors. We note with interest that critics of futures exchange practices have not attempted to extend their prescriptions to the derivatives markets which generally trade *sans* fungibility or the financial safeguards associated with clearing mechanism – horizontally or vertically aligned.

Notional Value of Outstanding Futures vs. Derivatives
(In Billion USD as of December 2001)

[4] Statement of Mr. Jan R. Waye, Senior Vice President, Cargill Investor Services Inc., "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

Interest Rate Futures		OTC Interest Rate Derivatives	
Futures	$9,234.0	FRAs	$7,737.0
Options	$12,492.6	Swaps	$58,897.0
		Options	$10,879.0
Total	$21,726.6	Total	$77,513.0
Currency Futures		**OTC Currency Derivatives**	
Futures	$65.6	Forwards and swaps	$10,336.0
Options	$27.4	Currency Swaps	$3,942.0
		Options	$2,470.0
Total Currency	$93.0	Total Currency	$16,748.0
Equity Index Futures		**Equity Index Derivatives**	
Futures	$334.0	Forwards and swaps	$320.0
Options	$1,563.7	Options	$1,561.0
		ETFs	~$120.0 *
		Index Funds	$60.0+ *
Total Equity Index	$1,897.7	Total Equity Index	$2,061.0+
Grand Total	***$23,717.3***	***Grand Total***	***$96,142.0***

Source: BIS Quarterly Review, June 2002
* These figures are estimates – note that the Vanguard 500 alone accounts for approximately $60 billion in equity capital. Thus, this figure is very conservative as it does not account for the many more index funds available.

Competition is not limited to the product level but extends to the clearing organization level as well where various entities have recently registered as Derivative Clearing Organizations ("DCOs") including BrokerTec Clearing Company; EnergyClear Corporation; London Clearing House ("LCH"); and, The Options Clearing Corporation ("OCC") – in addition to pending application of Hedge Street Inc. – and the seven clearing organizations that were designated DCOs per the grandfather clause.

Diversity of Contract Designs **–** Unlike a security which exists independently and apart from any securities exchange, a futures contract is a non-generic, constructed product. It is typically designed by the staff of a futures exchange and is often unique in terms of its particular attributes, potentially invoking intellectual property issues. Because futures products are designed in such a way as to enhance the exchange value proposition, you will typically find that competing products in nascent markets are created with non-generic terms that reflect the exchange's unique judgment regarding market utility.[5]

Consider, for example, the recent competitions for agency and swap futures. The CME and the Chicago Board of Trade ("CBOT") developed agency and swap futures at roughly the

[5] Diversity of contract design features sets futures apart from the securities marketplace. It further distinguishes futures from the stock option marketplace. Stock option contract terms and conditions are well established and generic – having been established by the Put and Call Dealers Association long before the introduction of the Chicago Board Options Exchange ("CBOE") in 1972. But consider that this might not necessarily be the case except for the fact that stock option design standards are in fact established per the Rules and By-Laws of The Options Clearing Corporation ("OCC") which is the common clearing organization for the stock option industry and which technically issues stock options. We may only speculate that the competition based on product advancements within that industry might be accelerated in the absence of this "back-end" driven model.

same times – but with contract designs that diverged just a bit – in the case of agency futures – or quite significantly – in the case of swap futures.[6] Of course, the deployment of divergent contract designs based upon a common underlying risk precludes the possibility of fungibility.

Any attempt to force exchanges to adopt common design standards in the interest of fungibility detracts from competition based upon product innovation. Of course, we note that Mr. Damgard's comments were pointed more towards existing, rather than newly emerging, products. But the contract terms and conditions of even the most successful, established contracts are often refined and modified. Would you require an exchange to coordinate any such modifications with its competitors to promote fungibility?

***Innovation* –** Exchanges – like any other business including brokerage firms – must be free to tinker and experiment in order to develop and refine products which will serve customers to the fullest extent, *i.e.*, to innovate.

In this regard, our record speaks for itself … "Indeed, emulating the Chicago Laureate legacy of Milton Friedman, George J. Stigler, Merton M. Miller, Gary Becker, Robert Fogel, Robert E. Lucas, Jr., and Myron Scholes, Chicago's innovative soul is quite unique. Beginning in the 1850s with the inauguration of futures markets in the U.S., to the 1960s break from storable products, to the revolutionary introduction of financial instruments in the 1970s, to the development of security options contracts, to the 1980s induction of cash settlement in place of physical delivery, to the inception of mini-futures in the 1990s, Chicago markets have consistently been the incubator of innovation." [7]

Fungibility implies that exchanges share their design advancements with competitors and possibly forgo any benefits accruing thereby – the antithesis of innovation. At a minimum, enforced fungibility slows the pace of innovation. At its worst, it begs the question … why innovate?

Common clearing by an industry utility likewise stifles innovation to the extent that a common clearing organization may be disinclined to devote resources to develop systems to support new and different contract design features. To the extent that a utility is established to serve the needs of the community, it may turn away any one member of the community that has even minimally unique needs.

We would argue that the derivatives industry is far from a mature industry but that growth opportunities abound. This is underscored by the recent volume and open interest growth in our businesses at the CME and in OTC derivatives. While economic conditions certainly promoted use of these markets, we would further cite innovations with respect to CME's electronic trading systems and the relatively recent introduction of our E-Mini products,

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[6] The CME and CBOT agency futures contracts diverged slightly in terms of the conversion factor standards employed – the CME contract was based upon a 6.5% standard while the CBOT contract was based upon a 6% standard. The CME and CBOT swap futures differ much more significantly. The CME contracts are quoted per the "IMM Index" – or 100 less the quoted rate. CBOT swap futures are quoted in percent of par akin to CBOT Treasury futures contracts.

[7] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

designed specifically for that electronic environment, as significant marketplace and product design advancements. Very mature, static industries may be conducive to administration as a utility – growth markets may be stifled by the same.

Liquidity and Transparency – Mr. Damgard recognizes that "[i]t is no secret that liquidity is essential to the success of any futures contract." [8] We wholeheartedly concur and suggest that while CME's mainstream products may be identified as stock index, interest rate or currency futures – our major asset may be characterized as liquidity. But … "liquidity is as elusive as it is vital." [9] Thus, we suggest that competition for existing products has not so much been precluded by structural considerations – rather it has sometimes been stymied by the difficulties of competing with markets that have rallied significant pools of liquidity.

Liquidity is a nebulous concept that is difficult to define but easy to recognize – measured in terms of a market's tightness, depth, immediacy and resiliency. It is likewise difficult to achieve – appearing to depend upon mustering some critical mass of interest, participation and price competition by a diverse group of liquidity providers, commercial and public participants.

But once that critical mass is achieved, futures market participants invariably gravitate to the most liquid markets – to the exclusion of others. Thus, we would be pressed to identify multiple futures exchanges simultaneously and successfully trading substitutable products. This is further underscored by the propensity of house traders who are compensated on an incentive basis to resist possible suggestions from the house to direct trade to particular venues to the exclusion of others. Rather, these traders will seek the most liquid alternative.

So while there is no dearth of competition, the viability of such competition may be limited by the fact that traders consistently seek the most liquid market offerings … "there are a lot of electronic 'wannabes.' There's insufficient liquidity to make any of them particularly viable yet." [10]

An instructive analogy may be found in the securities markets … "[i]nvestment banks and other players in the industry launched one electronic exchange after another, usually to much fanfare, followed by a long embarrassed silence as the new *wunderkind* died an untimely death of low liquidity and teething reliability problems. Where exchanges are inefficient, perceived as unfair or hamstrung by regulation, these new entrants succeed in grabbing market share – as Island and Instinet in the U.S. have shown. That these attempts have fallen flat in Europe – from Tradepoint to Jiway, is because they offered little that wasn't being done, and better or cheaper, elsewhere." [11]

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[8] Statement of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

[9] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

[10] Statement of Mr. Jan R. Waye, Senior Vice President, Cargill Investor Services Inc., "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

[11] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.

Intense price competition from many market participants results in a marshalling of liquidity. And an important by-product of the marshalling of liquidity implicit in successful futures markets is marketplace transparency. Transparency assures customers that competitive forces will be well informed if market prices should trade to levels inconsistent with prevailing conditions. Arbitrageurs can be relied upon to take advantage of aberrant price movements, restoring equilibrium balance. By contrast, markets characterized by fragmentation are often opaque, lending themselves to potential pricing abuse.

CME's business model represents a time tested method of marshalling that critical mass of liquidity necessary in support of a successful futures contract – and on a transparent basis. Still, we cannot reduce the process to a fixed formula – for every market we have introduced successfully, we have unsuccessfully attempted to introduce many more. The nebulous nature of liquidity is such that we continue – and will always continue – to experiment with and refine the formula in an attempt to build liquidity to a higher crescendo. There is no specific evidence that enforced fungibility – a measure that could serve to fragment the marketplace – may be more effective in promoting price competition.

***Financial Integrity* –** Note that Core Principle 11 of Section 5(d) of the CEA requires Designated Contract Markets ("DCMs") to provide for the financial integrity of its contracts by establishing and enforcing rules "providing for the integrity of any contracts traded on the contract market (including the clearance and settlement of the transactions with a derivatives clearing organization)." In this we have been highly successful as CME has never experienced even a single default – a statement that many horizontally aligned clearing houses cannot make. As such, we have been a bulwark for the highest principles under the CEA – "the reduction of systemic risk, the protection of customers, and the efficient operation of the markets." [12]

We recognize that the Commission allows for the retention of independent DCOs for these purposes. But in the final analysis, it is CME's considered belief that it can best discharge its responsibilities to insure the financial integrity of the marketplace by operating an integrated execution, clearing and settlement facility "so that at all times … [we may monitor] … the pulse of the entire marketplace."[13] Clearly, it would be counterintuitive to compel an exchange to assume responsibility for the operations of an independent clearing organization whose actions it cannot control or whose activities it cannot monitor closely.

2. Common Clearing

Common clearing implies efficiencies with respect to the use of capital, consolidated infrastructures and cost. Certainly these were the arguments that motivated efforts of just a few short years ago – initiated by the good offices of the FIA – to consolidate CME and Board of Trade Clearing Corporation ("BOTCC") clearing operations. Perhaps the timing was unripe or the specifics of the consolidation were inappropriate.

[12] Statement of Mr. John P. Davidson, Managing Director, Morgan Stanley Dean Witter, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002. Note that Mr. Davidson serves on the CME Risk Committee.
[13] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

Still, the underlying motives were not lost on CME. Accordingly, we respectfully suggest that the CME Clearing House has actively pursued programs which achieve in large measure the stated benefits of common clearing.

Cross-Margining Programs – Common clearing implies the ability to offer margin concessions in recognition of offsetting positions in correlated markets. That is precisely the intent of CME's various cross-margining programs with other clearing organizations, incorporating most major derivatives market segments. We estimate that CME's cross-margining programs result in performance bond savings of approximately $350 million on a daily basis.

The Exchange's cross-margining systems generally require performance bonds in amounts that reflect the aggregate position of affiliated clearing members in specified products, relying upon the sophisticated risk-based systems of each clearing organization. Typically, the respective clearing organizations jointly hold a first lien on, and security interest in, the positions of cross-margined accounts. Performance bond deposits associated with these accounts are jointly held.

Cross-margining enhances both the efficiency and financial integrity of the clearing system by treating all positions as economically one – permitting gains accruing to futures or options positions to be immediately available to meet the requirements for funds from losing positions.

CME participates in a cross-margining system with the Options Clearing Corporation ("OCC") and the New York Clearing Corporation ("NYCC"). This system is applied to the accounts of market professionals and proprietary traders. The system has been developed in recognition of the economic linkage among the exchange-traded derivative products, the need to promote efficient clearing procedures and a focus on true inter-market risk exposures. CME had implemented a similar but separate program with the Board of Trade Clearing Corporation ("BOTCC") to cross-margin selected interest rate products. This program was subsequently terminated due to lack of use on the part of institutional market participants.

On March 31, 2000, CME implemented a cross margin agreement with the London Clearing House ("LCH") for select interest rate products. The LCH program differs from programs mentioned above to the extent that performance bond collateral is held separately at each respective Clearing House. This has the effect of relieving firms from the burden of balancing two separate position accounts.

Commencing June 17, 2002, CME implemented a cross-margining program with regard to E-Mini energy products offered on the New York Mercantile Exchange ("NYMEX"). In April 2002, CME implemented a cross-margining agreement with Government Securities Clearing Corporation ("GSCC") which recognizes the reduced risks associated with portfolios including certain U.S. Treasury securities and CME Eurodollar futures and options.

Clearing Interfaces/Banking Relationships – CME has actively endeavored to develop and conform to industry standards with respect to interfaces between the Clearing House and customers. We have worked closely, for example, with BOTCC and the FIA to standardize out-trade reports, trade record (TREX) formats and trade register reports. Further, we have been active in pursuing the standardization of give-up and average price system processes noting that our give-up billing system known as GAINS was jointly developed with BOTCC. Both CME and BOTCC worked closely with the FIA Chicago Operation Division Ad Hoc Committee on Uniformity during the period when a common Chicago clearing organization was discussed. These efforts continue insofar as we are now working with BOTCC and FIA representatives in pursuit of the next generation of messaging in the form of FIXml standards.

Common banking is another benefit of common clearing. CME and BOTCC initiated a Pilot Common Banking Program in June 1999. The Program represented a collateral allocation plan that allowed participating FCMs to freely allocate collateral to either participating clearing organization from special bank accounts jointly owned by the two clearing organizations. The program featured CME's Clearing 21 Banking and Asset Management facility as a single user interface. Only three FCMs participated in this program and it was terminated in January 2002.

Reliability – Vertically integrated operations promote system reliability by ensuring coordinated processing from execution through the clearing and settlement processes. Again, citing experience in the European securities industry … "[t]he entire value-added chain of securities processing from the initial matching of trades and the determination of prices to the final steps in clearing and settlement has to work with extremely high reliability. Where new systems are very frequently introduced, and improvement is continuous, only vertically integrated organizations can combine innovation with the level of reliability that customers require." [14]

3. Costs

There is no compelling evidence that vertically integrated operations do not achieve cost savings on a level equal to or surpassing any other model in practice today. "On a post-netted basis, the different domestic settlement organizations in Europe … [which are vertically integrated within exchanges] … are as cost-efficient as the … DTCC … [whose operations vastly exceed the scope of these European settlement organizations] … A centralized agency is thus not necessarily cheaper than competing organizations."[15] In fact, we believe that a vertically integrated model actually reduces costs by diffusing the cost of overhead resources, facilities and software licenses.

Comparing Apples to Apples? – Mr. Damgard has questioned CME fee structures in support of his arguments … in reference to CME's E-Mini S&P 500 futures contract, he has noted … "[y]ou pay 39-cent-per side fee for clearing. You pay a 25-cent-per-side Globex fee. And you pay a Globex customer fee of 50 cents. So that adds up to $1.14 per side … And for comparison purposes, we picked the Dow Jones Euro … [STOXX contract] … that trades electronically at the Eurex. And that trades for 27 cents a side." [16] We respectfully believe that this comparison is misleading in a number of ways.

[14] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.
[15] "The Securities Settlement Industry in the EU," Lannoo & Levin, CEPS Research Report, December 2001.
[16] Testimony of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

First, one might observe that the $1.14 CME fee applies to "customers" while the Eurex 30 EURO (~$0.30) fee applies to all market participants. But the weighted average fee charged to CME customers and liquidity providers reduces to $0.37.[17] One might further discount the CME fee to $0.22 recognizing that the notional value of an E-Mini S&P is ~170% as large as a Euro STOXX contract ($0.22=$0.37/1.7). This $0.22 CME fee compares favorably to the ~$0.30 Eurex fee. Second, please note that Euro STOXX futures are licensed exclusively to Eurex – an exchange which operates a vertically integrated execution, clearing and settlement facility. Thus, one cannot attribute these fee differences to structural issues.

A Valid Comparison – Perhaps a more appropriate comparison might be found in the form of CBOT's Mini $5 Dow contract – sized comparably, and offered as direct competition to CME's E-Mini S&P 500. The Mini $5 Dow contract entails customer transaction and clearing fees of $1.05 – not remarkably different than the $1.14 associated with the CME contract. CBOT also offers reduced fees to liquidity providers – like CME – effectively reducing weighted average fees. Note that this contract clears at the horizontally aligned and independent BOTCC. Again, it is unclear that these structural considerations impact upon fee schedules.

Recognized Value Leader – We concede that CME fees are structured to favor liquidity providers. This practice is intended to marshal liquidity in such a manner as to reduce the true total costs associated with trading, including fees and, notably, execution slippage. In this we have been most successful, as underscored by independent studies.

Goldman Sachs found that "commissions … [including exchange fees and brokerage charges] … represent only a small part of overall transaction costs for futures, typically well under 5% of total trading costs." Comparing CME E-Minis, ETFs and stocks … "futures contracts are the cheapest to trade and … stock[s] … the most expensive. This is primarily due to higher commissions for stocks (and ETFs), a wider bid/ask spread, and higher market impact."[18] It is noteworthy that stocks and ETFs are traded on a fungible basis and cleared through common facilities.

Estimated Costs of Trading Futures, ETFs, Stocks

(Basis Points per $100 Million Notional Value)

	Standard S&P 500	E-Mini S&P 500	S&P 500 SPDR	Stock Portfolio
Commissions (Exchange+Brokerage Fees)	0.1	0.4	3.5	4.2
Bid/Ask Spread	1.5	1.5	2.5	5.0
Market Impact or Slippage	18.0	18.0	26.0	39.2
Total Trading Costs	19.6	19.9	32.0	39.2
Commissions as % of Total Costs	0.7%	2.2%	11.0%	10.6%

Source: Goldman Sachs Global Derivatives and Trading Research (April 4, 2002)

[17] Note that the distinction between locals and customers is not necessarily black and white with respect to fees. Fee discounts are frequently accessed by large end-users. Conversely, "liquidity providers" are not necessarily limited to floor traders but often include proprietary trading operations and other upstairs participants.

[18] Goldman Sachs Global Derivatives and Trading Research (April 4, 2002).

Some have applied the term "monopoly" in reference to vertically integrated exchanges. But … "[t]he pricing behaviour of clearing houses proves that their monopoly rents are non-existent – clearers and settlement organizations owned by exchanges are actually cheaper than those owned by the intermediaries. And the market would never allow that one step of the value chain is subsidizing another … [C]ompatibility of … [the trading, clearing and settlement functions] … can significantly lower the fixed costs, enabling higher asset productivity … If you look at liquidity as an asset, it is more than beneficial to both the customers and the providers to leverage the productivity of the assembled liquidity over the entire securities processing chain. It goes without saying, that the openness of 'vertically integrated [exchanges]' …is in the natural business interest of every manager of … [an exchange]." [19]

4. Control

In the final analysis, this discussion is about control of the central source of value in any transactional equation – *the bid-offer spread.* This fact is underscored by Mr. Davis's recent testimony before the CFTC when he remarked that exchanges are … "becoming private corporations primarily focused on the interests of their shareholders. The majority of their shareholders are locals whose interest is in maintaining the grip of the open-outcry system of futures trading. *This hold often prevents those customers who wish to take advantage of other forms of trading – such as internalization or crossing between major market participants* – from doing so, because of the rules requiring exposure to the floor." [Italics added for emphasis.] [20]

We share the concerns of Former SEC Chairman Arthur Levitt regarding such a result … "the Commission is concerned about certain broker-dealer practices – internalization and payment for order flow – that substantially reduce the opportunity for investor orders to interact … Reduced order interaction, if pervasive, may hamper price competition, interfere with the process of public price discovery, and detract from the depth and stability of the markets … Price matching dealers thereby take advantage of the public price discovery process provided by other market centers … but need not contribute to the process of price discovery … This creates disincentives for vigorous price competition, which, if extensive, could lead to wider bid-asked spreads, less depth, and higher transaction costs. If these occur, all orders could receive poorer executions, not just the ones that are subject … [to] … internalization and payment for order flow arrangements." [21]

Similar controversies have erupted in European securities markets where … "[t]he whole debate, disguised ideologically, is nothing else than an understandable dispute about the redistribution of the industry profit between the investors and issuers on the one side, and the intermediaries on the other side, with the … [exchanges] … being the turntable, market organization being the instrument of change, and the bid/offer spread being the desired target." [22]

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[19] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.
[20] Statement of Mr. Kevin Davis, President, Man Financial Inc., "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.
[21] Testimony of Former SEC Chairman Arthur Levitt before the Senate Committee on Banking, Housing and Urban Affairs on Preserving and Strengthening the National Market System for Securities in the U.S., May 8, 2000.
[22] "Managing Growth in the Securities Process Chain," Prof. Dr. Werner Seifert.

It is indeed unfortunate that the central issue has been obfuscated under the thin veil of enhanced competition. [23]

Exchange Governance – CME has recently demutualized, thereby transforming itself from a membership organization to a for-profit corporation which should serve to broaden the ownership in the corporation. Like any corporation, we have responsibilities to serve the interests of our shareholders. We must also serve the interests of our customers – noting that there is a healthy overlap between these two constituencies. As such, we are guided by an unforgiving market discipline requiring that we serve the interests of our customers in order to forward the interests of our shareholders. Accordingly, our policy is to emphasize an intense customer focus.

In light of the important forward steps we are making in this regard – at the vanguard of the domestic futures industry – we must respectfully disagree with Mr. Damgard's observation that "we have seen far less progress than we had anticipated in the evolution of exchanges. For example, the boards of directors of the major exchanges remain dominated by representatives of the floor community."[24] We invite clearing member firm representatives to participate in CME's governance by seeking election as Directors of the Exchange.

Open Outcry and Screen Trading – Mr. Damgard has suggested that "the transition from floor to screen has been halted at the halfway point, requiring FCMs to carry the financial burden of maintaining two trading systems on each exchange."[25] Note that CME's progress in this area is far from halted, with electronic trading continuing to grow rapidly as we witness the markets making the transition to an electronic platform in an intelligent manner.

But electronic trading systems are still in their relative infancy. We are, accordingly, reluctant to mandate migration to the screen and risk possible disruption of that potentially fragile alchemy of liquidity. Rather, we have operated floor and electronic trading venues on a side-by-side basis – providing FCMs and their customers with freedom of choice. If there was one clearly superior trading venue, that would be reflected in the marketplace. While the proportion of electronic trading has been growing swiftly on CME, the pace of this transition has been uneven in different market sectors.

Still, we have been diligent in our efforts to enhance the utility of our GLOBEX trading platform – witness developments including open access to the GLOBEX platform, the

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[23] One might reasonably extend a prescription of fungibility and common clearing to over-the-counter interest rate swap ("IRS") markets as easily as to futures markets. A variety of derivatives desks offer their customers "plain vanilla" swap products – essentially identical contracts distinguished only with respect to the credit risk of the counterparty. These products lend themselves nicely to the concept of fungibility – with the *caveat* that regulators mandate common clearing – thereby rendering the counterparty credit risk of such instruments generic. However, we suspect that such a proposal might not be well received amongst the broker dealer community to the extent that such initiatives might erode the lucrative bid/offer spreads maintained in the fragmented and opaque IRS marketplace.

[24] Testimony of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

[25] Testimony of Mr. John M. Damgard, Chairman and President, Futures Industry Association, "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

introduction of Lead Market Maker ("LMM") functionality and the impending introduction of implied spread ("EAGLE") functionality, amongst other enhancements. In further support of our commitment to electronic trading, we offer that – while Exchange headcount has remained relatively stable in the vicinity of near 1,000 employees, Information Technology ("IT") staff has tripled in size over the past three years. *I.e.*, we have invested and will continue to invest considerable time, funds and human resources towards the development of our electronic trading platforms.

We do so because we believe that the screen will eventually achieve that critical mass of liquidity that will cause most trading to be directed thereto. Accordingly … "while it is mandatory to create the best electronic system that can be devised, while we must advance its use and effectiveness, the market and only the market, can dictate the timing of transference." [26]

Block Trading **–** An unfortunate perception plainly persists that "… in Chicago … we are forced to put all orders into the pits; which means that if we have a large buy or a large sell, and even if we could find the other side of that, from a Morgan Stanley or from any other major player, we are forced to hit a bid or take an offer. And so we are routinely forced, on behalf of our customers, to leave a spread in the pit for the locals." [27]

This perception is contradicted by the availability of the block trading facility on CME. Block trading was introduced on the CME in November 2000. A block trade represents a privately negotiated futures or option transaction executed apart from the public auction market and governed by CME Rule 526, BLOCK TRANSACTIONS. This mechanism has been widely publicized and frequently utilized. Note, however, that block trading is subject to certain restrictions including a minimum quantity requirement and may only be practiced by Eligible Contract Participants ("ECPs") as defined in Section 1a(12) of the CEA.

These restrictions were adopted to reflect Commission policies and out of concern that uncontrolled internalization or crossing of orders on the part of firms may fragment market liquidity or obfuscate an otherwise transparent market pricing mechanism. In other words, to ensure the continued viability of an open, transparent marketplace – avoiding the negative results articulated by Mr. Levitt as cited above. [28]

Margin Policies **–** Mr. Davis further testified before the Commission that he finds it "increasingly disturbing that exchanges which do control their own clearinghouses are able to use their collateral levels or their margin requirements as a competitive influence … The levels of margins are sometimes set with as much view to the competitive edge of the exchange as to the collateral required for the underlying product … And I think it's inappropriate for those margin levels to be set by the exchanges themselves, because, after all, they're now for-profit

[26] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

[27] Statement of Mr. Kevin Davis, President, Man Financial Inc., "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.

[28] It is illuminating to cite the frequency of block trading on BrokerTec – a facility owned by intermediaries. During the period December 2001 through June 2002, some 12.97% of the volume recorded on BrokerTec was blocked. On many days, the proportion was much higher, peaking at 82.79%. Note that some 0.10% of trades recorded on the CME were blocked during the same period.

businesses, they are interested in attracting as much business as they possibly can. The net loser is the FCM, because we're the ones who stand between the clearinghouse and the customer." [29]

This statement seems to be at odds with other inquiries we have received from the FIA questioning CME's practice of margining customer accounts on a gross rather than a net basis – begging the question – are performance bonds too high or too low? [30] These observations further contradict the hypothesis that there is a dearth of effective competition within the futures industry with respect to existing products.

We assert that CME's financial safeguard policies, including margin policies, are established with the sole purpose of protecting market participants from adverse credit events. These policies are in fact established per the direction of the CME Clearing House Risk Committee, comprised of six clearing member FCMs and a settlement banker, which is charged with the preservation of the financial integrity of our marketplace.

5. Conclusion

The dual prescriptive remedies of fungibility and common clearing appear, superficially, to hold some appeal. They appear, superficially, to promote enhanced competition, to reduce transaction costs for the benefit of customers. But if the Commission were to enforce fungibility or common clearing, we fear that might prove fatal. In particular, we must recognize the underlying ambitions of the proponents of these measures and the resulting effects …

> "They want to internalize their dealings, take the markets upstairs and exploit the profit from the bid/ask spreads. In doing so, they will no doubt make lots of money, but there will be two fundamental casualties in their wake.
>
> "The first will be in the transparency implicit in the exchange-transaction-process, one that is vital to the world and its regulators. Need we explain the inherent dangers in the loss of transparency? If you want a glimpse of where lack of full disclosure in the marketplace can lead, you need look no further than the result of ambiguous account practices that were an accepted standard by many on Wall Street. Need we revisit the causes of the Enron debacle? …
>
> "The second casualty will be that of innovation. Does anyone here remember the last innovation produced by a utility?"
>
> "At least in part, this debate is an offshoot of the ongoing competitive debate between centralized exchanges and ECNs. Who provides the most efficient forum, the highest liquidity, the best price at the cheapest cost? Well the winner of that debate can only be determined by the ultimate arbiter – the marketplace itself. And although the jury is still out, there has already been some indication which way the verdict is leaning. Countless of would-be-competitive ECNs that were launched with great hoopla during the B2B bubble, now find themselves in the historical scrap-heap. Indeed, long before the terrorist

[29] Comments of Mr. Kevin Davis, President, Man Financial Inc., "Public Hearing on the CFTC Study of Potential Changes in the Regulation of Intermediaries," June 6, 2002.
[30] Letter sent to candidates for election to the Board of Directors of Chicago Mercantile Exchange Holdings Inc. from the Futures Industry Association dated April 5, 2002.

> attacks, there was growing recognition by participants that centralized exchanges provided the best combination of the ingredients necessary for safety and liquidity … That theme is amplified – by an order of magnitude – with the Enron experience." [31]

Accordingly, and in conclusion, we respectfully request that the Commission consider an alternate prescription … let the marketplace decide.

We appreciate this opportunity to communicate our viewpoints with respect to these important issues and to participate in the Roundtable discussions scheduled for August 1st. We understand and appreciate the viewpoint of others within the industry with whom we may not always see eye-to-eye. And, we remain committed to serving the best interests of the futures community and look forward to continued dialogue in this regard.

Sincerely,

/jwl

CC: The Honorable James E. Newsome
The Honorable Barbara Pedersen Holum
The Honorable Thomas J. Erickson
Ms. Eileen Chotiner, Division of Clearing & Intermediary Oversight

[31] Statement of Mr. Leo Melamed, Chairman Emeritus, Chicago Mercantile Exchange, "Federal Reserve Bank Roundtable on the Institutional Structure of Financial Markets," February 15, 2002.

	EDU	EDZ	EDH	EDM	EDU5	EDZ5	EDH6	EDM6	EDU6	EDZ6	EDH7	EDM7	EDU7	EDZ7	EDH8	EDM8	EDU8	EDZ8	EDH9	EDM9
6/21/2004																				
CME	9793.0	9740.0	9693.5	9653.0	9618.5	9587.5	9563.0	9543.5	9527.5	9512.5	9500.0	9487.0	9476.0	9463.0	9453.5	9442.5	9433.5	9424.0	9416.5	9408.5
LIFFE	9793.0	9740.0	9693.5	9653.0	9618.5	9587.5	9563.5	9543.5	9527.5	9512.5	9500.0	9487.0	9476.0	9463.0	9453.5	9442.5	9433.5	9424.0	9416.5	9408.5
DIFF.	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
6/22/2004																				
CME	9792.5	9738.5	9692.0	9652.0	9618.0	9587.5	9564.0	9544.5	9528.5	9513.0	9500.0	9486.5	9475.0	9462.0	9452.5	9441.5	9432.5	9423.0	9415.5	9407.5
LIFFE	9792.5	9738.5	9692.0	9652.0	9618.0	9587.5	9564.0	9544.5	9528.5	9513.0	9500.0	9486.5	9475.0	9462.0	9452.5	9441.5	9432.5	9423.0	9415.5	9407.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/23/2004																				
CME	9792.5	9740.0	9693.0	9653.0	9619.0	9588.5	9565.0	9545.5	9529.5	9513.5	9500.0	9486.5	9475.0	9462.0	9452.5	9441.5	9432.5	9423.0	9415.5	9407.5
LIFFE	9792.5	9740.0	9693.0	9653.0	9619.0	9588.5	9565.0	9545.5	9529.5	9513.5	9500.0	9486.5	9475.0	9462.0	9452.5	9441.5	9432.5	9423.0	9415.5	9407.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/24/2004																				
CME	9794.5	9743.5	9698.0	9658.5	9625.0	9595.5	9571.5	9552.0	9535.5	9519.5	9506.0	9492.5	9480.5	9467.5	9458.0	9447.0	9437.5	9428.0	9420.5	9412.5
LIFFE	9794.5	9743.5	9698.0	9658.5	9625.0	9595.5	9571.5	9552.0	9535.5	9519.5	9506.0	9492.5	9480.5	9467.5	9458.0	9447.0	9437.5	9428.0	9420.5	9412.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/25/2004																				
CME	9794.0	9743.5	9698.5	9659.0	9625.5	9595.5	9572.0	9552.5	9536.0	9520.0	9506.0	9492.5	9480.5	9467.5	9458.0	9447.0	9437.0	9427.5	9420.0	9412.0
LIFFE	9794.0	9743.5	9698.5	9659.0	9625.5	9595.5	9572.0	9552.5	9536.0	9520.0	9506.0	9492.5	9480.5	9467.5	9458.0	9447.0	9437.0	9427.5	9420.0	9412.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/28/2004																				
CME	9788.5	9734.0	9685.5	9644.0	9610.0	9581.0	9559.0	9540.5	9524.5	9509.0	9495.5	9482.0	9470.0	9457.0	9447.5	9436.5	9426.5	9417.0	9409.5	9401.5
LIFFE	9788.5	9734.0	9685.5	9644.0	9610.0	9581.0	9559.0	9540.5	9524.5	9509.0	9495.5	9482.0	9470.0	9457.0	9447.5	9436.5	9426.5	9417.0	9409.5	9401.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/29/2004																				
CME	9789.5	9736.5	9689.5	9648.0	9614.0	9585.5	9564.5	9546.0	9530.0	9514.5	9501.0	9488.0	9476.0	9463.0	9453.5	9443.0	9433.0	9423.5	9416.0	9408.0
LIFFE	9789.5	9736.5	9689.5	9648.0	9614.0	9585.5	9564.5	9546.0	9530.0	9514.5	9501.0	9488.0	9476.0	9463.0	9453.5	9443.0	9433.0	9423.5	9416.0	9408.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/30/2004																				
CME	9798.0	9748.5	9703.0	9663.0	9630.0	9601.0	9579.5	9561.0	9544.0	9527.5	9513.5	9499.5	9487.0	9474.0	9464.0	9453.5	9443.0	9433.5	9426.0	9417.5
LIFFE	9798.0	9748.5	9703.0	9663.0	9630.0	9601.0	9579.5	9561.0	9544.0	9527.5	9513.5	9499.5	9487.0	9474.0	9464.0	9453.5	9443.0	9433.5	9426.0	9417.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2004																				
CME	9800.5	9754.5	9712.5	9675.0	9641.0	9612.0	9590.0	9571.0	9553.0	9536.5	9522.0	9507.5	9494.5	9481.0	9470.5	9459.5	9449.0	9439.5	9431.5	9422.5
LIFFE	9800.5	9754.5	9712.5	9675.0	9641.0	9612.0	9590.0	9571.0	9553.0	9536.5	9522.0	9507.5	9494.5	9481.0	9470.5	9459.5	9449.0	9439.5	9431.5	9422.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/2/2004																				
CME	9805.5	9766.0	9727.5	9692.0	9659.0	9629.5	9606.0	9585.5	9567.0	9549.5	9534.5	9519.5	9506.0	9492.5	9481.5	9470.0	9459.5	9449.5	9441.5	9432.5
LIFFE	9805.5	9766.0	9727.5	9692.0	9659.0	9629.5	9606.0	9585.5	9567.0	9549.5	9534.5	9519.5	9506.0	9492.5	9481.5	9470.0	9459.5	9449.5	9441.5	9432.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/6/2004																				
CME	9806.0	9765.5	9726.0	9690.0	9656.5	9626.0	9602.5	9582.5	9564.5	9547.5	9533.0	9518.5	9505.5	9492.0	9481.0	9469.5	9459.0	9449.0	9441.0	9432.0
LIFFE	9806.0	9765.5	9726.0	9690.0	9656.5	9626.0	9602.5	9582.5	9564.5	9547.5	9533.0	9518.5	9505.5	9492.0	9481.0	9469.5	9459.0	9449.0	9441.0	9432.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7/7/2004																				
CME	9806.5	9766.0	9727.0	9691.0	9657.5	9626.5	9603.0	9582.5	9565.0	9548.0	9533.5	9519.5	9506.5	9493.0	9482.0	9470.5	9460.0	9450.0	9442.0	9433.0
LIFFE	9806.5	9766.0	9727.0	9691.0	9657.5	9626.5	9603.0	9582.5	9565.0	9548.0	9533.5	9519.5	9506.5	9493.0	9482.0	9470.5	9460.0	9450.0	9442.0	9433.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/8/2004																				
CME	9807.0	9767.0	9728.5	9693.5	9660.0	9629.5	9605.5	9585.0	9567.5	9550.5	9536.0	9522.0	9508.5	9495.0	9483.5	9472.0	9461.0	9451.0	9442.5	9433.5
LIFFE	9807.0	9767.0	9728.5	9693.5	9660.0	9629.5	9605.5	9585.0	9567.5	9550.5	9536.0	9522.0	9508.5	9495.0	9483.5	9472.0	9461.0	9451.0	9442.5	9433.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/9/2004																				
CME	9807.5	9767.5	9730.0	9694.5	9661.0	9630.0	9606.0	9585.5	9568.5	9551.5	9537.0	9523.0	9509.0	9495.0	9483.5	9472.0	9461.0	9450.5	9442.0	9433.0
LIFFE	9807.5	9767.5	9730.0	9694.5	9661.0	9630.0	9606.0	9585.5	9568.5	9551.5	9537.0	9523.0	9509.0	9495.0	9483.5	9472.0	9461.0	9450.5	9442.0	9433.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/12/2004																				
CME	9808.0	9767.5	9730.0	9694.5	9661.0	9630.0	9606.5	9586.5	9570.0	9553.5	9539.0	9525.5	9511.5	9498.0	9487.0	9475.5	9464.5	9454.0	9445.0	9436.0
LIFFE	9808.0	9768.0	9730.5	9695.0	9661.5	9630.5	9606.5	9586.5	9571.0	9554.0	9539.5	9525.5	9512.0	9498.0	9486.5	9475.0	9464.0	9453.5	9445.0	9436.0
DIFF.	0	0.5	0.5	0.5	0.5	0.5	0	0	1	0.5	0.5	0	0.5	0	-0.5	-0.5	-0.5	-0.5	0	0
7/13/2004																				
CME	9806.5	9764.5	9725.0	9688.5	9655.5	9625.0	9601.5	9581.5	9565.0	9548.5	9534.5	9521.0	9507.5	9494.0	9483.0	9471.5	9460.5	9450.0	9441.0	9432.0
LIFFE	9806.5	9764.5	9725.0	9688.5	9655.5	9625.0	9601.5	9581.5	9565.0	9548.5	9534.5	9521.0	9507.5	9494.0	9483.0	9471.5	9460.5	9450.0	9441.0	9432.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/14/2004																				
CME	9806.5	9763.5	9723.0	9685.5	9651.5	9620.5	9597.5	9578.0	9561.5	9545.5	9532.0	9519.0	9506.0	9493.0	9482.0	9471.0	9460.5	9450.0	9441.0	9432.0
LIFFE	9806.5	9763.5	9723.0	9685.5	9651.5	9620.5	9597.5	9578.0	9561.5	9545.5	9532.0	9519.0	9506.0	9493.0	9482.0	9471.0	9460.5	9450.0	9441.0	9432.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/15/2004																				
CME	9806.5	9763.0	9721.5	9683.0	9649.0	9618.0	9595.5	9576.5	9560.5	9545.0	9531.5	9518.5	9506.0	9493.0	9482.5	9471.5	9461.0	9450.5	9442.0	9433.0
LIFFE	9806.5	9763.0	9721.5	9683.0	9649.0	9618.0	9595.5	9576.5	9560.5	9545.0	9531.5	9518.5	9506.0	9493.0	9482.5	9471.5	9461.0	9450.5	9442.0	9433.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/16/2004																				
CME	9809.5	9769.5	9732.0	9696.0	9663.0	9633.0	9611.0	9593.0	9577.5	9562.0	9548.5	9535.5	9523.0	9510.0	9499.5	9488.5	9478.0	9467.5	9459.0	9450.0
LIFFE	9809.5	9769.5	9732.0	9696.0	9663.0	9633.0	9611.0	9593.0	9577.5	9562.0	9548.5	9535.5	9523.0	9510.0	9499.5	9488.5	9478.0	9467.5	9459.0	9450.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/19/2004																				
CME	9810.0	9769.5	9731.0	9694.5	9661.5	9632.0	9609.5	9591.5	9576.0	9560.5	9547.5	9534.5	9522.0	9509.5	9499.0	9488.0	9478.0	9467.5	9459.0	9450.0
LIFFE	9810.0	9769.5	9731.0	9694.5	9661.5	9632.0	9609.5	9591.5	9576.0	9560.5	9547.5	9534.5	9522.0	9509.5	9499.0	9488.0	9478.0	9467.5	9459.0	9450.0
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/20/2004																				
CME	9806.0	9761.0	9719.0	9680.0	9646.5	9617.0	9595.0	9578.0	9563.0	9548.0	9535.5	9523.0	9511.0	9499.0	9489.0	9478.5	9468.5	9458.5	9450.0	9441.5
LIFFE	9806.0	9761.0	9719.0	9680.0	9646.5	9617.0	9595.0	9578.0	9563.0	9548.0	9535.5	9523.0	9511.0	9499.0	9489.0	9478.5	9468.5	9458.5	9450.0	9441.5
DIFF.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/21/2004																				
CME	9804.0	9757.0	9713.0	9674.0	9640.0	9611.0	9589.5	9572.5	9557.5	9543.0	9530.5	9518.0	9506.0	9494.0	9484.5	9474.5	9464.5	9454.5	9446.5	9438.0
LIFFE	9804.0	9757.0	9713.0	9674.0	9640.0	9611.0	9590.0	9573.0	9558.0	9543.0	9531.0	9518.0	9506.0	9494.0	9485.0	9475.0	9465.0	9455.0	9447.0	9438.0
DIFF.	0	0	0	0	0	0	0.5	0.5	0.5	0	0.5	0	0	0	0.5	0.5	0.5	0.5	0.5	0
7/22/2004																				
CME	9805.0	9758.5	9715.5	9676.0	9642.5	9614.0	9593.0	9575.5	9560.5	9546.0	9533.5	9521.0	9509.0	9497.0	9487.5	9477.5	9467.0	9457.0	9449.0	9440.5
LIFFE	9805.0	9759.0	9716.0	9676.0	9643.0	9614.0	9593.0	9576.0	9561.0	9546.0	9534.0	9521.0	9509.0	9497.0	9488.0	9478.0	9467.0	9457.0	9449.0	9441.0
DIFF.	0	0.5	0.5	0	0.5	0	0	0.5	0.5	0	0.5	0	0	0	0.5	0.5	0	0	0	0.5
7/23/2004																				
CME	9805.5	9760.5	9717.0	9677.5	9643.5	9615.5	9594.5	9577.0	9562.5	9548.5	9536.0	9523.5	9512.0	9500.5	9491.0	9481.0	9471.0	9461.0	9453.0	9444.5
LIFFE	9805.5	9760.5	9717.0	9677.5	9643.5	9615.0	9594.5	9577.0	9562.5	9548.5	9536.0	9523.5	9512.0	9500.5	9491.5	9481.0	9471.0	9461.0	9453.0	9444.5
DIFF.	0	0	0	0	0	-0.5	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0

7/26/2004																				
CME	9804.0	9756.0	9712.0	9672.5	9639.0	9610.0	9589.5	9572.5	9557.5	9543.0	9530.5	9518.5	9507.5	9496.5	9487.0	9477.0	9467.5	9458.0	9450.0	9441.5
LIFFE	9804.0	9756.0	9712.0	9672.5	9639.0	9610.0	9589.5	9572.5	9557.5	9543.0	9530.5	9518.5	9507.5	9496.5	9487.0	9477.0	9467.5	9458.0	9450.0	9441.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7/27/2004																				
CME	9801.5	9751.0	9705.0	9664.0	9629.0	9600.0	9579.0	9561.0	9545.5	9530.5	9517.5	9505.5	9494.0	9482.5	9472.5	9462.0	9452.5	9443.5	9436.0	9428.0
LIFFE	9801.5	9751.0	9705.0	9664.0	9629.0	9600.0	9579.0	9561.0	9545.5	9530.5	9517.5	9505.5	9494.0	9482.5	9472.5	9462.0	9452.5	9443.5	9436.0	9428.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7/28/2004																				
CME	9802.0	9753.5	9709.5	9669.5	9635.0	9605.5	9584.0	9565.0	9548.5	9533.0	9519.5	9506.5	9494.5	9482.5	9472.0	9461.5	9452.0	9442.5	9434.5	9426.5
LIFFE	9802.0	9753.5	9709.5	9669.5	9635.0	9605.5	9584.0	9565.0	9548.5	9533.0	9519.5	9506.5	9494.5	9482.5	9472.0	9461.5	9452.0	9442.5	9434.5	9426.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7/29/2004																				
CME	9803.0	9757.5	9715.0	9676.5	9642.0	9612.0	9590.0	9571.5	9554.5	9538.5	9524.5	9511.0	9499.0	9486.5	9475.5	9464.5	9454.5	9444.5	9436.0	9427.5
LIFFE	9803.0	9757.5	9715.0	9676.5	9642.0	9612.0	9590.0	9571.0	9553.5	9538.0	9524.5	9511.0	9499.0	9486.5	9475.5	9464.5	9454.5	9444.5	9436.0	9427.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-0.5**	**-1**	**-0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7/30/2004																				
CME	9806.0	9764.0	9724.0	9687.0	9653.0	9622.5	9600.0	9581.5	9564.5	9548.5	9534.5	9521.5	9510.0	9497.5	9487.0	9476.0	9466.0	9456.0	9447.5	9439.0
LIFFE	9806.0	9764.0	9724.0	9687.0	9653.0	9622.5	9600.0	9581.5	9564.5	9548.5	9534.5	9521.5	9510.0	9497.5	9487.0	9476.0	9466.0	9456.0	9447.5	9439.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/2/2004																				
CME	9808.0	9767.0	9728.0	9691.0	9657.0	9626.0	9602.5	9583.0	9566.5	9550.5	9536.5	9523.5	9512.0	9499.5	9489.0	9478.0	9468.0	9458.0	9449.5	9441.0
LIFFE	9808.0	9767.0	9728.0	9691.0	9657.0	9626.0	9602.5	9583.0	9566.5	9550.5	9536.5	9523.5	9512.0	9499.5	9489.0	9478.0	9468.0	9458.0	9449.5	9441.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/3/2004																				
CME	9808.0	9767.0	9728.0	9691.0	9657.0	9626.0	9602.5	9583.0	9566.5	9550.5	9536.5	9523.5	9512.0	9499.5	9489.0	9478.0	9468.0	9458.0	9449.5	9441.0
LIFFE	9808.0	9767.0	9728.0	9691.0	9657.0	9626.0	9602.5	9583.0	9566.5	9550.5	9536.5	9523.5	9512.0	9499.5	9489.0	9478.0	9468.0	9458.0	9449.5	9441.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/4/2004																				
CME	9808.0	9767.5	9728.0	9691.5	9657.5	9627.0	9604.5	9585.0	9569.0	9553.0	9540.0	9527.5	9515.5	9503.0	9492.5	9482.0	9472.5	9463.0	9454.5	9446.0
LIFFE	9808.0	9767.5	9728.0	9691.5	9657.5	9627.0	9604.5	9585.0	9569.0	9553.0	9540.0	9527.5	9515.5	9503.0	9492.5	9482.0	9472.5	9463.0	9454.5	9446.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/5/2004																				
CME	9809.0	9770.0	9730.5	9694.0	9660.5	9630.0	9607.0	9588.0	9571.5	9556.0	9543.0	9530.5	9518.5	9506.0	9495.5	9485.5	9475.5	9466.0	9457.5	9449.0
LIFFE	9809.0	9770.0	9730.5	9694.0	9660.5	9630.0	9607.0	9588.0	9571.5	9556.0	9543.0	9530.5	9518.5	9506.0	9495.5	9485.5	9475.5	9466.0	9457.5	9449.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

8/5/2004																				
CME	9817.5	9789.0	9758.0	9726.0	9695.0	9666.0	9642.5	9620.5	9601.5	9584.5	9570.0	9556.0	9542.5	9529.0	9517.5	9506.5	9495.5	9485.5	9476.5	9467.5
LIFFE	9817.5	9789.0	9758.0	9726.0	9695.0	9666.0	9642.5	9620.5	9601.5	9584.5	9570.0	9556.0	9542.5	9529.0	9517.5	9506.5	9495.5	9485.5	9476.5	9467.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/9/2004																				
CME	9816.5	9785.5	9753.5	9721.5	9690.0	9660.5	9637.0	9615.5	9597.5	9580.5	9566.0	9552.0	9539.0	9526.0	9515.0	9504.5	9493.5	9483.5	9474.5	9465.5
LIFFE	9816.5	9785.5	9753.5	9721.5	9690.0	9660.5	9637.0	9615.5	9597.5	9580.5	9566.0	9552.0	9539.0	9526.0	9515.0	9504.5	9493.5	9483.5	9474.5	9465.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/10/2004																				
CME	9813.0	9779.0	9745.0	9711.5	9679.5	9650.0	9626.0	9606.0	9589.0	9572.5	9558.0	9544.5	9532.0	9519.5	9509.0	9499.0	9488.5	9478.5	9469.5	9461.0
LIFFE	9813.0	9779.0	9745.0	9711.5	9679.5	9650.0	9626.0	9606.0	9589.0	9572.5	9558.0	9544.5	9532.0	9519.5	9509.0	9499.0	9488.5	9478.5	9469.5	9461.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/11/2004																				
CME	9813.0	9780.5	9748.0	9715.5	9683.0	9653.0	9629.5	9609.5	9592.0	9575.5	9561.0	9547.5	9535.0	9522.0	9511.0	9500.5	9490.0	9480.0	9471.0	9462.5
LIFFE	9813.0	9780.5	9748.0	9715.5	9683.0	9653.0	9629.5	9609.5	9592.0	9575.5	9561.0	9547.5	9535.0	9522.0	9511.0	9500.5	9490.0	9480.0	9471.0	9462.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/12/2004																				
CME	9812.0	9780.5	9748.5	9717.0	9686.0	9656.5	9632.5	9612.5	9595.5	9579.0	9565.0	9551.5	9539.0	9526.0	9515.0	9504.5	9494.5	9484.5	9475.5	9467.0
LIFFE	9812.0	9780.5	9748.5	9717.0	9686.0	9656.5	9632.5	9612.5	9595.5	9579.0	9565.0	9551.5	9539.0	9526.0	9515.0	9504.5	9494.5	9484.5	9475.5	9467.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/13/2004																				
CME	9813.0	9780.5	9748.0	9715.5	9683.0	9653.0	9629.5	9609.5	9592.0	9575.5	9561.0	9547.5	9535.0	9522.0	9511.0	9500.5	9490.0	9480.0	9471.0	9462.5
LIFFE	9813.0	9780.5	9748.0	9715.5	9683.0	9653.0	9629.5	9609.5	9592.0	9575.5	9561.0	9547.5	9535.0	9522.0	9511.0	9500.5	9490.0	9480.0	9471.0	9462.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/16/2004																				
CME	9811.5	9781.0	9751.0	9720.5	9690.0	9660.5	9638.0	9618.0	9600.5	9584.0	9570.0	9556.0	9543.5	9531.0	9519.0	9508.5	9498.0	9487.5	9478.0	9469.0
LIFFE	9811.5	9781.0	9751.0	9720.5	9690.0	9660.5	9638.0	9618.0	9600.5	9584.0	9570.0	9556.0	9543.5	9531.0	9519.0	9508.5	9498.0	9487.5	9478.0	9469.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/17/2004																				
CME	9813.0	9784.0	9756.0	9727.0	9697.5	9668.5	9646.0	9625.0	9607.5	9591.0	9577.0	9563.0	9550.0	9537.5	9525.5	9514.5	9504.0	9493.5	9484.0	9474.5
LIFFE	9813.0	9784.0	9756.0	9727.0	9697.5	9668.5	9646.0	9625.0	9607.5	9591.0	9577.0	9563.0	9550.0	9537.5	9525.5	9514.5	9504.0	9493.5	9484.0	9474.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/18/2004																				
CME	9813.2	9783.5	9756.0	9726.5	9697.0	9668.5	9646.0	9625.5	9608.0	9591.5	9577.0	9562.5	9549.5	9536.5	9524.5	9513.0	9502.5	9491.5	9482.0	9472.5
LIFFE	9813.2	9783.5	9756.0	9726.5	9697.0	9668.5	9646.0	9625.5	9608.0	9591.5	9577.0	9562.5	9549.5	9536.5	9524.5	9513.0	9502.5	9491.5	9482.0	9472.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/19/2004																				
CME	9813.2	9784.0	9757.5	9729.0	9700.5	9672.0	9649.5	9629.5	9612.5	9596.0	9581.5	9567.0	9554.0	9540.5	9528.0	9516.5	9505.5	9494.5	9485.0	9475.0
LIFFE	9813.2	9784.0	9757.5	9729.0	9700.5	9672.0	9649.5	9629.5	9612.5	9596.0	9581.5	9567.0	9554.0	9540.5	9528.0	9516.5	9505.5	9494.5	9485.0	9475.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/20/2004																				
CME	9812.5	9782.5	9754.5	9726.5	9697.5	9669.0	9646.5	9626.5	9609.5	9592.5	9577.5	9563.0	9549.5	9536.0	9523.5	9512.0	9500.5	9489.5	9480.0	9470.0
LIFFE	9812.5	9782.0	9754.5	9726.5	9697.5	9669.0	9646.5	9626.5	9609.5	9592.5	9577.5	9563.0	9549.5	9536.0	9523.5	9512.0	9500.5	9489.5	9480.0	9470.0
DIFF.	**0**	**-0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/23/2004																				
CME	9811.2	9779.0	9751.0	9722.0	9692.5	9664.5	9641.5	9621.5	9604.0	9587.0	9572.0	9557.5	9544.0	9530.5	9518.0	9506.5	9495.0	9484.5	9475.5	9465.5
LIFFE	9811.0	9779.0	9751.0	9722.0	9692.5	9664.5	9641.5	9621.5	9604.0	9587.0	9572.0	9557.5	9544.0	9530.5	9518.0	9506.5	9495.0	9484.5	9475.5	9465.5
DIFF.	**-0.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/24/2004																				
CME	9810.0	9778.0	9751.0	9722.0	9693.0	9665.0	9642.0	9622.0	9604.0	9587.0	9572.0	9557.5	9544.0	9530.5	9518.0	9506.5	9495.0	9484.5	9475.0	9465.0
LIFFE	9810.0	9778.0	9751.0	9722.0	9693.0	9665.0	9642.0	9622.0	9604.0	9587.0	9572.0	9557.5	9544.0	9530.5	9518.0	9506.5	9495.0	9484.5	9475.0	9465.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

8/25/2004																				
CME	9810.3	9777.5	9750.0	9722.0	9693.5	9665.0	9642.0	9622.0	9604.5	9587.5	9573.0	9559.0	9545.5	9532.0	9520.0	9508.5	9497.5	9487.0	9477.5	9467.5
LIFFE	9810.5	9777.5	9750.0	9722.0	9693.5	9665.0	9642.0	9622.0	9604.5	9587.5	9573.0	9559.0	9545.5	9532.0	9520.0	9508.5	9497.5	9487.0	9477.5	9467.5
DIFF.	**0.25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/26/2004																				
CME	9811.0	9778.0	9751.0	9724.0	9696.0	9667.5	9644.5	9624.5	9607.5	9591.0	9576.5	9562.5	9549.5	9536.0	9524.0	9512.5	9501.5	9491.0	9481.5	9471.5
LIFFE	9811.0	9778.0	9751.0	9724.0	9696.0	9667.5	9644.5	9624.5	9607.5	9591.0	9576.5	9562.5	9549.5	9536.0	9524.0	9512.5	9501.5	9491.0	9481.5	9471.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/27/2004																				
CME	9811.7	9778.5	9751.0	9724.0	9696.5	9668.0	9645.0	9625.0	9608.0	9591.5	9577.0	9563.0	9549.5	9536.0	9524.0	9512.5	9501.5	9490.5	9481.0	9470.5
LIFFE	9812.0	9778.5	9751.0	9724.0	9696.5	9668.0	9645.0	9625.0	9608.0	9591.5	9577.0	9563.0	9549.5	9536.0	9524.0	9512.5	9501.5	9490.5	9481.0	9470.5
DIFF.	**0.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/30/2004																				
CME	9812.5	9779.5	9753.5	9727.5	9700.5	9672.5	9649.0	9629.0	9612.0	9595.5	9581.0	9567.0	9553.5	9540.0	9528.0	9516.5	9505.5	9494.5	9484.5	9474.0
LIFFE	9812.5	9779.5	9753.5	9727.5	9700.5	9672.5	9649.0	9629.0	9610.5	9595.5	9581.0	9567.0	9553.5	9540.0	9528.0	9516.5	9505.5	9494.5	9484.5	9474.0
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-1.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8/31/2004																				
CME	9813.2	9782.5	9758.0	9734.0	9708.5	9681.0	9658.0	9638.0	9621.0	9604.5	9590.0	9575.5	9562.0	9548.5	9536.5	9525.0	9513.5	9502.5	9492.5	9482.0
LIFFE	9813.5	9782.5	9758.0	9734.5	9708.5	9681.0	9658.0	9638.0	9621.0	9604.5	9590.0	9575.5	9562.0	9548.5	9536.5	9525.0	9513.5	9502.5	9492.5	9482.0
DIFF.	**0.3**	**0**	**0**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
9/1/2004																				
CME	9814.7	9784.5	9760.5	9736.5	9711.0	9683.5	9661.0	9641.0	9624.0	9607.0	9592.0	9577.5	9564.0	9550.0	9538.0	9526.0	9514.5	9503.5	9493.5	9483.5
LIFFE	9815.0	9784.5	9760.5	9736.5	9711.0	9683.5	9661.0	9641.0	9624.0	9607.0	9592.0	9577.5	9564.0	9550.0	9538.0	9526.0	9514.5	9503.5	9493.5	9483.5
DIFF.	**0.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
9/2/2004																				
CME	9813.0	9780.0	9755.0	9730.5	9704.5	9677.5	9655.0	9634.0	9616.5	9599.0	9584.0	9569.5	9555.0	9541.5	9529.5	9517.0	9505.5	9494.5	9484.5	9474.5
LIFFE	9813.0	9780.0	9755.0	9730.5	9704.5	9677.5	9655.0	9634.0	9616.5	9599.0	9584.0	9569.5	9555.0	9541.5	9529.5	9517.0	9505.5	9494.5	9484.5	9474.5
DIFF.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
9/3/2004																				
CME	9808.7	9768.5	9738.5	9710.5	9683.5	9657.0	9635.5	9616.0	9599.5	9582.5	9568.0	9554.0	9540.5	9527.0	9515.5	9504.0	9493.0	9482.0	9472.0	9462.5
LIFFE	9808.5	9769.0	9739.0	9711.0	9684.0	9657.5	9635.5	9616.0	9599.5	9582.5	9568.0	9554.0	9540.5	9527.0	9515.5	9504.0	9493.0	9482.0	9472.0	9462.5
DIFF.	**-0.2**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**